

## Bench & Chairs Height (NBC B-12.6)

The height of the seat of chairs and benches will be between **450 - 500 mm**.

## Tables (NBC B-25.3 f, B-20.4)

In bars, restaurants and eateries a minimum of **25%** of the tables shall be usable by wheelchair users.

Cantilevered table or tables with straight legs at each corner are preferable to central pedestals that might restrict wheelchair access.

In bars, where stools and high tables are provided, low tables suitable for wheelchair users shall be provided. A minimum of **25%** of bar counters shall not be more than **800 mm** height, and shall have an unobstructed lateral access for wheelchair users (sideways reach).

Ensuring access between moveable tables in refreshment areas. Sufficient manoeuvring space between tables and the route to the accessible toilet facilities shall be provided.

The seating space for a wheelchair user at the dining table should provide a clear knee space. The clear knee space for a wheelchair user is at least **900 mm wide, 480 mm deep and 680 - 700 mm high**.

A bedside table or cabinet between **450 - 900 mm** \* from the floor may be useful to hold a lamp, telephone, necessary medications and a call bell if assistance is needed.

## Wheelchair Clearance Area (NBC B-20.4)

There should be a clear floor space for the wheelchair of at least **900 × 1200 mm** in front of all the fixtures.

## Reception Areas and Service Counters (NBC B-10)

### Hearing Assistance (NBC B-10.1)

Reception areas, counters, ticket offices, especially in noisy environments or those equipped with a separating security screen, should have at least one position fitted with a hearing enhancement system (for example induction loop system) to assist hearing-aid users and be clearly marked with the appropriate signage/symbol.

### Location (NBC B-10.2)

Counters and reception desks should be located and clearly identified so that they are easily recognisable from a building entrance. Information reception areas should be positioned near the main entrance.

### Manoeuvring Space at Counters (NBC B-10.3)

Counters, desks and ticket offices should be accessible to wheelchair users on both sides. A clear manoeuvring space at least **1500 × 1500 mm** shall be provided on the receptionist's side and on the visitor's side; **1800 × 1800 mm** is preferred.

### Height & Clear-Space Underneath Counter (NBC B-10.4)

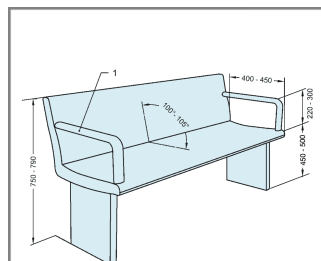
The counter-top level shall be between **750 - 800 mm** from the floor. Clear knee space underneath shall be a minimum of **700 mm**.

Reception desks where writing is done by the visitor (for example at hotel receptions) should allow frontal approach by wheelchair users with space to provide clearance for wheelchair users knees.

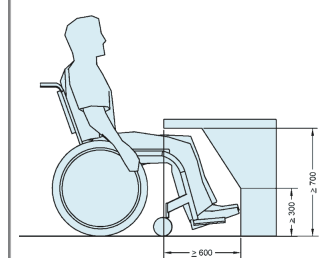
### Lighting (NBC - B-10.5)

To facilitate lip reading, lighting should provide even illumination. The reading and writing surfaces at counters, desks and ticket offices shall be illuminated to a level of at least **200 lux** in the room, and on the desk in a range of **350 - 450 lux**.

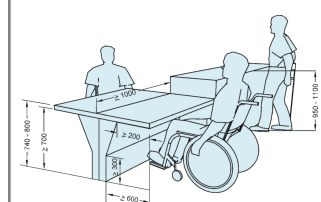
\*Note: This figure of 900 mm table height is in the NBC but is questionable as an accessible height for PwD.



NBC B-12.6 Chairs and Benches



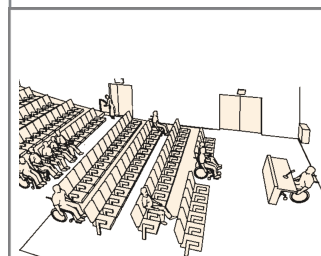
NBC B-25.3 f Tables



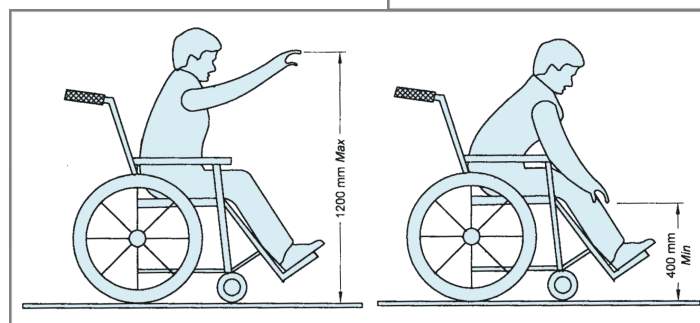
NBC B-10.4 Counters



NBC B-10.1 Symbols of Accessibility



NBC B-12 Auditorium



NBC B-1.4.3 Reach From Wheelchair High and Low

## Ticket, ATM, Information Machines (NBC B-7.9)

If a queue number ticket system is used, it shall be suitably designed to be accessible. All necessary information shall be given in simple wording with sufficient visual contrast and based on the two-sense principle (see Datasheet AS.01.08 Datasheet - Signage (CL)). The ticket machine and the calling system shall provide visual and audible output.

Machines for dispensing money, tickets or small goods should be accessible and should be located on an accessible level. The approach to dispensers should be clear and unobstructed, at least **900 mm wide**. A knee space of minimum **700 mm in height** and minimum **600 mm in depth** and **900 mm in width** should be provided to ease access for wheelchair users. The clear area immediately in front of the machine should be at least **1500 × 1500 mm**, to allow a wheelchair user to approach the controls sideways, and to turn around after use and to provide some privacy.

## Switches and Controls (NBC B-1.4.3)

### Height of Controls

- |   |                 |
|---|-----------------|
| a) Height of controls from floor level                      | : 400 - 1200 mm |
| b) Height for switches (power)                              | : 400 - 500 mm  |
| c) Height for switches (lights)                             | : 800 - 1200 mm |
| d) Height of door handles                                   | : 800 - 1100 mm |
| e) Opening controls for windows                             | : 800 - 1100 mm |
| f) Space required under the counter for wheelchair footrest | : 350 mm        |

## Operation - Control Switch Plates (NBC B-7.4)

For persons with reduced dexterity or impaired vision, electrical switches should have large push plates.

## Clear Access Space (NBC B-20.2.1)

All controls and operating mechanisms shall have a clear floor space for the wheelchair, of at least **900 × 1200 mm** should be provided in front of all the utilities.

## Shelves and Storage (NBC B-19)

The shelves should be at various levels between **300 - 1100 mm** from the floor surface.

## Auditoriums, Halls, Sports Arenas & Similar Seating Areas (NBC B-12)

### Quota of Designated Seating (NBC B-12.3)

At least **1%** with an absolute minimum of **two spaces** will be designated for wheelchair users. If the seating is between **51 and 100** a minimum of **three spaces**, between **101-200** a minimum of **four** and **one extra** for every **200** extra seats. The seats should be integrated into the other seating. Adequate provision should be made to direct the user to the designated spaces.

### Access to Stage and Backstage (NBC B-12.4)

Access to the stage and to the backstage area shall be provided for PwD including wheelchair users.

### Row and Seat Numbers (NBC B-12.5)

The row and seat numbers should be legible to people who have impaired vision. They should be tactile, of adequate size and have enough visual contrast to the background on which they are mounted.

### Changing Rooms (NBC B-12.6)

The minimum number of accessible changing rooms should be provided depending on the type and use of the building. They should follow the specifications of accessible changing/bathrooms.

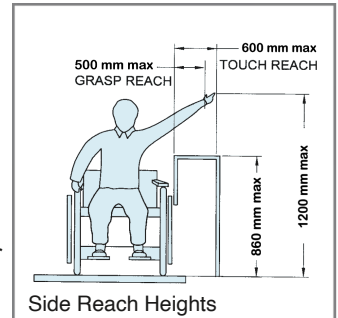
A fixed bench should be set at a height of **450 to 480 mm** above floor level. The bench should be no less than **500 mm wide**, **2000 mm** in length, and be provided with a grab bar at a height of **700 - 800 mm** with a clearance of between **50 - 65 mm** from the wall. A clear space of **1500 × 1500 mm** shall be beside the bench.

## Acoustics (NBC B-21)

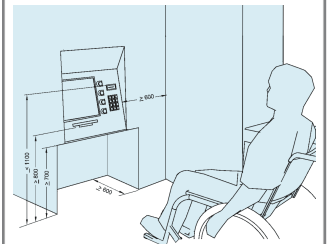
Acoustics design of conference rooms, auditorium, meeting rooms etc should be such as to minimise noise from outside and inside the building. Sound absorbing surfaces should prevent excess reverberations of background noise.

## Sight Lines (NBC B-14.2)

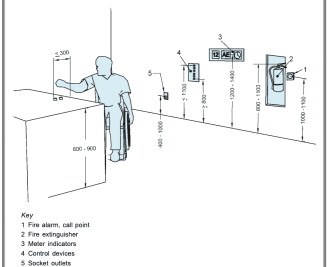
Wheelchair user viewing spaces shall provide viewing spaces that are comparable to those for all viewing positions with a minimum unobstructed eye level up to **1200 mm** and not reduced or obstructed by standing members of the audience.



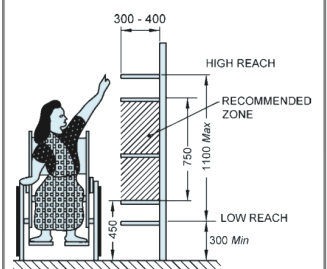
Side Reach Heights



ATM & Ticket Machines

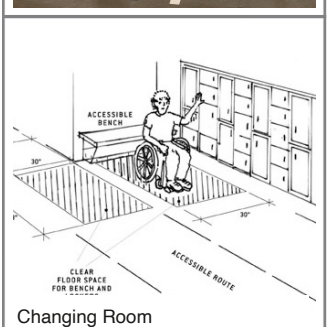


Switch & Control Heights



Shelf Height

Auditorium Seating



Changing Room

Establishment Name Building Name		Address			
Sn	Description	Required	Y/ N	Actual	Notes
01. 12. 01	Bench and Chair Heights	450-500mm			
01. 12. 02	Tables and Counters Clear Space Under Top	900 mm Wide 480 mm Deep 680 - 700 mm Height			
01. 12. 03	Sufficient Wheelchair Space between tables and other furniture and fittings	900 mm minimum 1200 mm preferred			
01. 12. 04	In restaurants and bars where high counters are provided at least 25% low height tables provided.	800 mm high max			
01. 12. 05	Controls and Switches Height	400 mm - 1200 mm			
01. 12. 06	Lights Switch Push Plates	Large Size			
01. 12. 07	If front of any control or mechanism the clear space	900 x 1200 mm			
01. 12. 08	Induction loop hearing aid system	provided at reception / service counter?			
01. 12. 09	Designated Seating in large seating areas.	Minimum 2 spaces 51-100: 3 spaces 101-200: 4 spaces Thereafter one more for every extra 200.			
01. 12. 10	Stage and back-stage	Accessible to PwD including wheelchair users?			
01. 12. 11	Row seat numbers	Large with LRV contrast of 70%			
01. 12. 12	Toilet provided in changing rooms	At least one complies with accessible toilet specifications.			
01. 12. 13	Shower / changing cubicles	At least one complies with accessible shower room specifications.			
01. 12. 14	Features of building design and materials to prevent echo, reverberations and noise from adjacent areas.	Sound proofing by design and materials provided.			
01. 12. 15	View for seated Wheelchair user unobstructed by objects	No obstruction from view above 1200 mm			
01. 12. 16	View for seated Wheelchair user unobstructed by standing persons.	View unobstructed by areas for standing spectators			
01. 12. 17	Other				