ACCESS TO ALL

SENSITIZATION PROGRAM

For

W.P.(C) 11711/2015

First heard on 18.12.2015

In

The High Court of Delhi at New Delhi

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ACKNOWLEDGEMENT

I would like to start off by profusely thanking the Hon'ble Acting Chief Justice, Delhi High Court Ms. Gita Mittal for asking us to write this booklet. The birth of this booklet came from my PIL, first heard on 18.12.2015, that asked the high court to intervene and exempt Persons with Disabilities (PwD's) from the Odd – Even scheme introduced by the Delhi Government due to the absence of accessible public transport. As part of our prayer, we'd also requested a mobility audit of the National capital to check how disabled friendly it is. I am extremely grateful to the Hon'ble justice for expanding the scope of the PIL and her vision to make Delhi a model accessible city for the country. It is her directions that asked us to prepare this manual to sensitize key stakeholders on the social and physical access Persons with Disabilities need to function in the city. If every High Court in India had a Chief Justice like her, India would be a very different country for PwD's.

I would like to also articulate my deep gratitude for my mother, Priyanka Malhotra who not only invested her youth to ensure I get a normal life (in a country that was far from ready to make PwD's flourish) but also later founded the Nipman Foundation along with me. She is a role model parent for any child with a disability.

This document would not have been possible without my friend and lawyer, Jai Dehadrai. I still remember expressing my concerns regarding the 'odd – even policy' when it was then announced and how it would mean an alternate stay at home day for me. My concern became his battle and I am grateful to him for all the support and time he has given to the cause. I would also like to thank Shivangini Gupta and Siddharth Arora from Dehadrai & Co. for all their support in this and my other case.

I would like to thank Aniesha Sachdeva, an architect and Universal Design Expert for her valuable inputs in the accessibility section of this document. I would also like to thank Dr. Alim Chandani, Associate Vice President, Centum Foundation and deaf rights activist for helping us articulate the needs of the deaf/hard of hearing. Furthermore, my sincere gratitude to George Abraham, CEO, Score Foundation and a passionate disability rights activist for helping us present the needs of the blind, with accuracy and lucidity.

Thank you to my father, Pravin Malhotra and my brother Manek, who have been my biggest sources of encouragement and my brand ambassadors through all the achievements in my life.

And thank you team Nipman Foundation. Anish Chandy, from our advisory board, for his inputs on content and structure. Vithika Aggarwal, my Executive Assistant, for burning the midnight lamp, putting in the long hours and single-handedly ensuring that the document is ready on time. Thank you to Adithiya Kumar and Apurvah Sahay Aarzoo for all their assistance.

Nipun Malhotra
CEO & Co – Founder
Nipman Foundation

INTRODUCTION

- by Nipun Malhotra

The definition of 'Disability' has gone through three stages of evolution in the last century.

Initially, disability was looked at through the framework of the '**Charity mode**l'. As per the 'charity model', Persons with Disabilities (PwD's) are those who need help. Unable to look after themselves, they need to be looked after and protected. They need others to make decisions on their behalf. The focus here was on emphasising the helplessness of disabled people. The main criticism of the charity model was that it took autonomy, independence and rights away from the disabled individual.

Gradually, the world moved to the '**Medical model**' of disability. As per the medical mode, the focus was on the impairment or in other words what was "wrong" with the person. It highlighted deviations from the 'norm' and tried to narrow that gap. The medical model clearly underlined that "problem" lay with the individual and what they could or couldn't do independently

The disability movement worldwide is now looked at through the lens of the '**Social model'**. The Principle tenet of this model is that the 'problem' does not lie with the individual. It is the environment that en-ables/ 'dis-ables'. So, for example, being a wheelchair user isn't the problem – having only stairs and no ramp is! Similarly, being deaf isn't the problem, but the lack of enough sign language interpreters is. 'Dis-ability' exists not because the individual is 'un-able', but because the barriers in attitudes, laws, infrastructure and policy do not 'en-able'. The focus of the social model is on PwD's participating fully in society, living independently, working productively and having full control over their lives.

It is, on the basis of the social model, that I have developed the **3 As framework of disability**. As per the 3 As framework, if Attitudes, Accessibility and Affordability are looked after, PwD's can live complete and satisfactory lives. Accordingly, the rest of the booklet has been divided as per the 3As. Please note, that the recommendations only cover physical disabilities as intellectual disabilities are beyond the scope of the PIL. In addition, technology is and will continue to be a game changer when it comes to PwD's and city planning. However, our focus here has been on the now and present. I do hope this book helps make Delhi an accessible and model city that India can be proud of.

ACCESSIBILITY

Access is creating and maintaining physical environments, in which people can participate in ways which are equitable, dignified, maximize independence, conserve energy and safe.

A poor environment can impair any person!
Figure: Cartoons representing (from left to right: Row 1) man on wheelchair, pregnant lady, boy with a fractured leg, woman carrying luggage; (from left to right: Row 2) blind man, woman with a toddler, visually impaired man and an elderly man

EXTERIOR CIRCULATION

Much emphasis is laid on easing movement of vehicles on roads. However, to make the physical landscape inclusive, an equal importance needs to be given to pedestrian movement. In principle, circulation needs to be consistent, well defined and un-obstructed. Tabulated below are some norms for the key circulation elements.

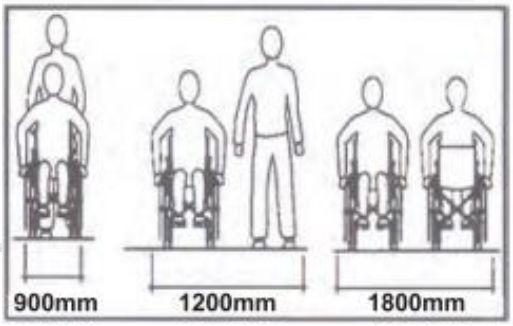
FOOTPATH

DIMENSIONS	: Minimum width of footpath should be 1800mm (70.9”) & Minimum clear, unobstructed path should be 1200mm (47.2”).
	: Height of footpath should be approx. 150mm (5.9”) from road level
FEATURES	: Resting places/ benches should be provided along the footpath.
	: Surface should be smooth, levelled, continuous, slip- resistant and even.
	: All Street furniture should be aligned to one side of the footpath, leaving circulation path clear
	: Bollards should be provided between the footpath and road at every crossing. These should be 1000mm (39.4”) high, painted in contrasting color stripes with clear gap of 900mm (35.43”) minimum.

DETAILS : Any change in level of the footpath should be clearly visible through use of bright contrasting colors

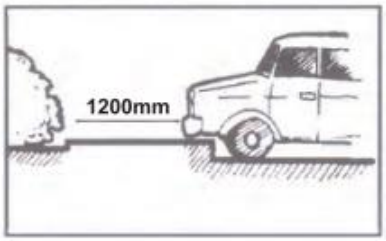
: One row of tactile tiles should be provided in the footpath, with proper corner tiles indicating any change in direction

: When parking space is next to a Footpath, wheel stoppers to be provided, to restrain vehicles from occupying space on the pedestrian pathway.



Min Footpath width is clear 1200mm

Bollards at crossing

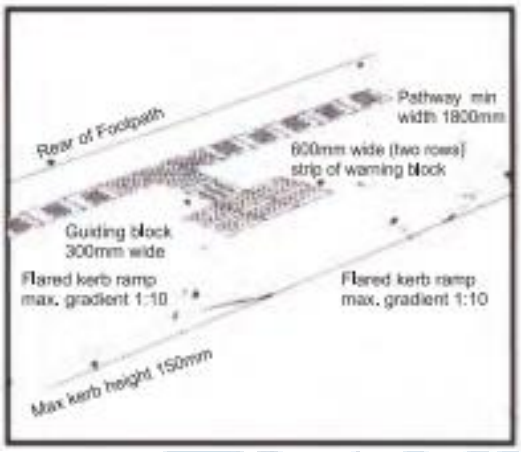


Wheel-stops to keep Footpath clear

KERB RAMP

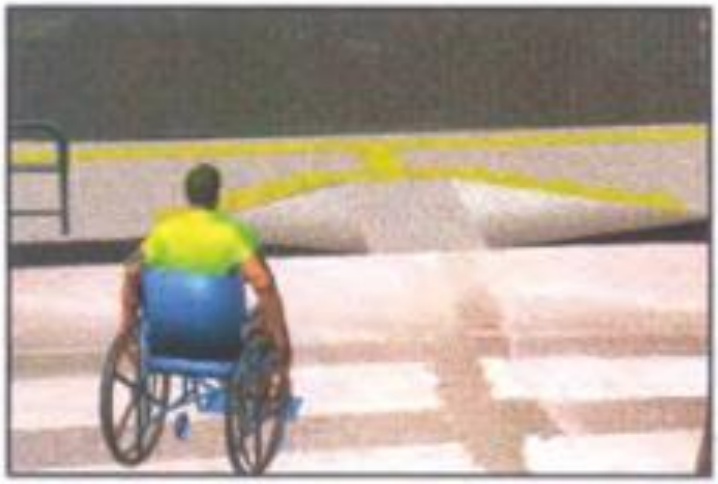
DIMENSIONS : Minimum width of Ramp should be 900mm (35.43”) to allow wheelchair access.
: Advisable ramp gradient is 1:15. Maximum accepted gradient is 1:12
: Gradient of the flared sides should not exceed 1:10

FEATURES : Should be provided at pedestrian crossings and near building entrances
: Warning Strip to be provided on the kerb side edge of the slope, so that persons with vision impairment do not accidentally walk onto the road.
: Should be dropped to be flushed with roadway, at a gradient no greater than1:10 on both sides of necessary and convenient cross points.



Warning Tactile tile to signal Kerb ramp

Kerb ramp to be provided are Pedestrian Crossings



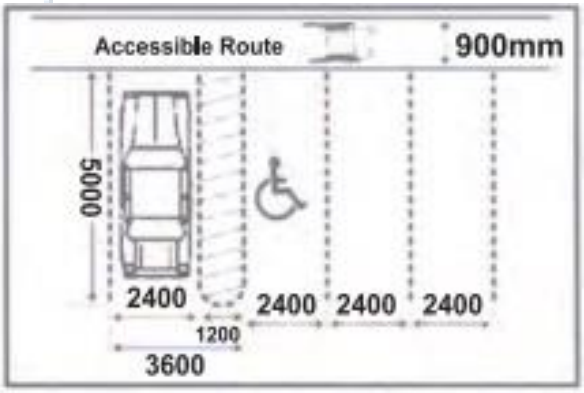
Min Kerb ramp width 900mm.
Recommended slope 1:15.
Flared sides gradient max. 1:10

PARKING

DIMENSIONS	: Parking, especially for PwD's should be located within 30m (98.4") of the main entrance of the building : Minimum 2 accessible parking lots with overall minimum dimension 3600mm x 5000mm (141.7" x 196.9") per parking space should be provided.
FEATURES	: The parking slots should have the international symbol of accessibility painted on the ground. : A signpost should be placed behind the Parking slot with the international symbol of accessibility painted to help identify the slot. : Directional signs need to be provided from the road onwards guiding people to the accessible parking space.

International symbol of accessibility painted on the ground

Signpost behind the parking slot for Identification



3600mm X 5000mm single parking slot. In case of space constraints, the 1200mm space may be used as common aligning space between 2 parallel car parks.

INTERIOR CIRCULATION

Circulation inside a building runs horizontally as well as vertical. Both these circulation types need to be planned for ease of accessibility. In addition, if possible, multiple options for vertical circulation should be explored to enhance efficiency of movement. Below are key pointers to be noted while designing building circulation.

CIRCULATION AREA

DIMENSIONS : Corridors should have an unobstructed width of min 1800mm (70.9”)

FEATURES : Corridors should be well lit.

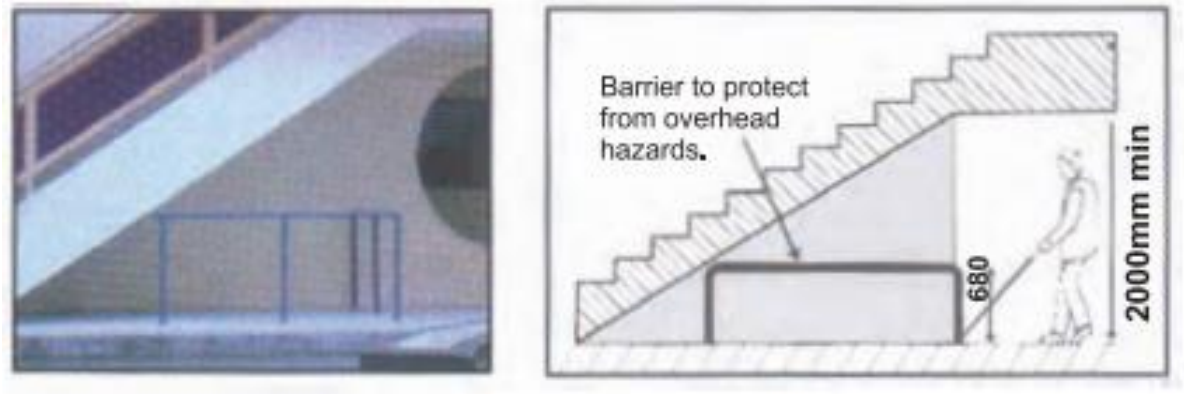
: There should be no protrusions like planters, shoe racks, chairs, consoles etc. inside the corridor

: Any objects protruding more than 100mm (3.9”) from the wall face should be placed either in a niche or at a height of 2100mm (82.7”) from the floor.

: Thresholds and gratings should not be more than 10mm (0.4”) or avoided.

: Level difference in flooring between wet and dry areas should be limited for the ease of motorized wheelchairs. All level differences should also be gently beveled

: To make open spaces below ramps, escalators and stairs accident free zones for the visually impaired, they should either be blocked out completely by protective guard rails or be marked through warning tiles.



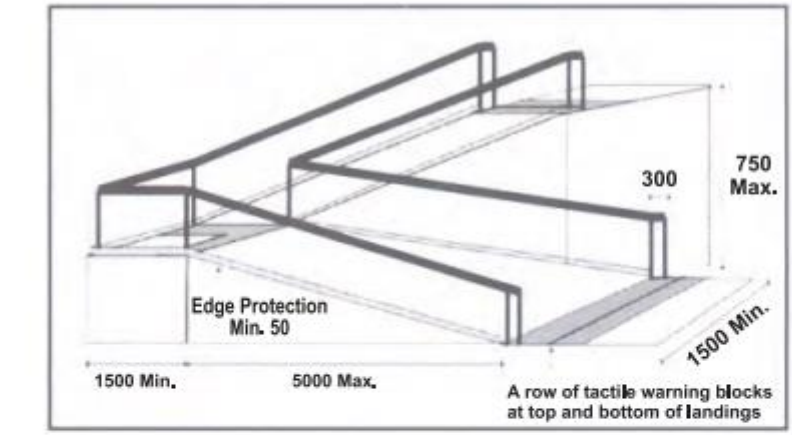
Spaces beneath Ramps & Stairs to be blocked

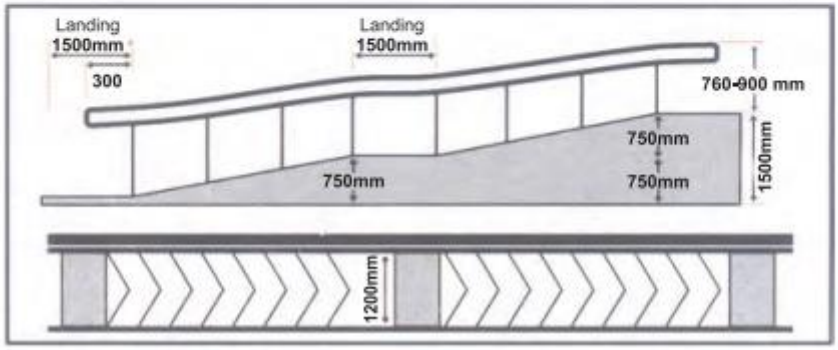
RAMPS

DIMENSIONS : For a Public building, the recommended ramp width is 1200mm (47.24”) or more.
: Maximum acceptable slope is 1:12
: A Landing needs to be provided every 750mm (29.5”) of vertical rise.

FEATURES : Handrails should be provided on both sides of the ramp.
: The Hand Rail should be provided at two levels- 760mm (29.9”) and 900mm (35.4”).
: The handrails should be circular in section with a diameter of 38mm, and a min. of 50mm clear from the wall surface to which they are attached. They should extend by at least 300mm beyond the head and foot of the ramp in the line of travel. Fixing should be sound and hard wearing.

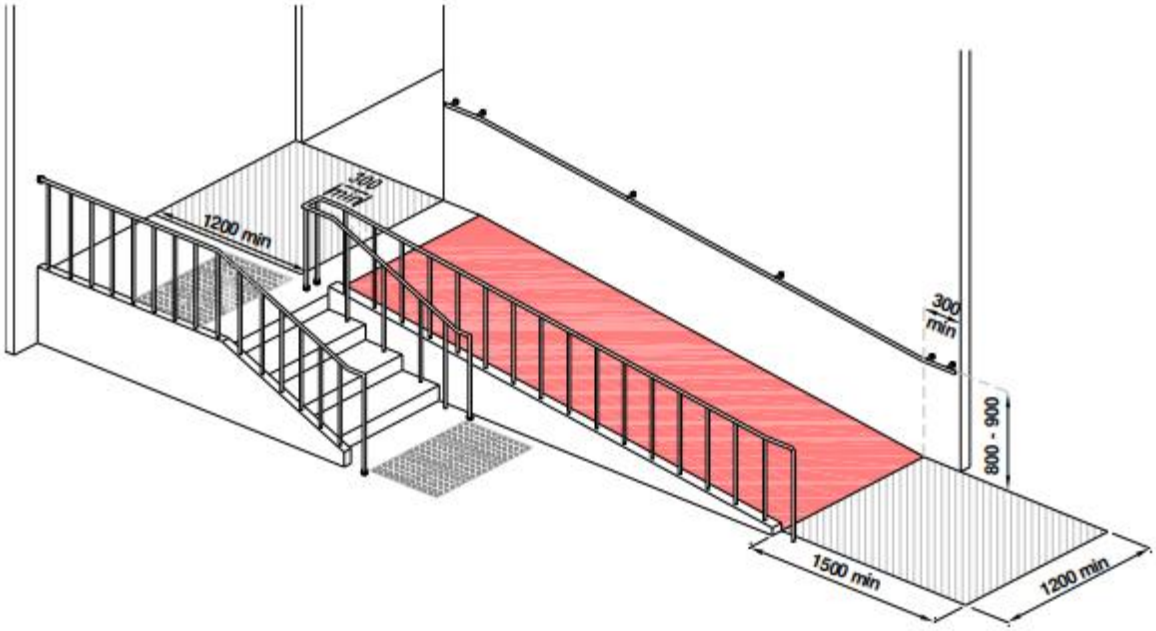
: Ramp surface (ramp + landing) should be slip resistant.
: A ramp should be accompanied by a flight of easy-going steps.
: A warning strip of tactile tiles should be placed at 300mm (11.8”) before the start and after the stop of the ramp



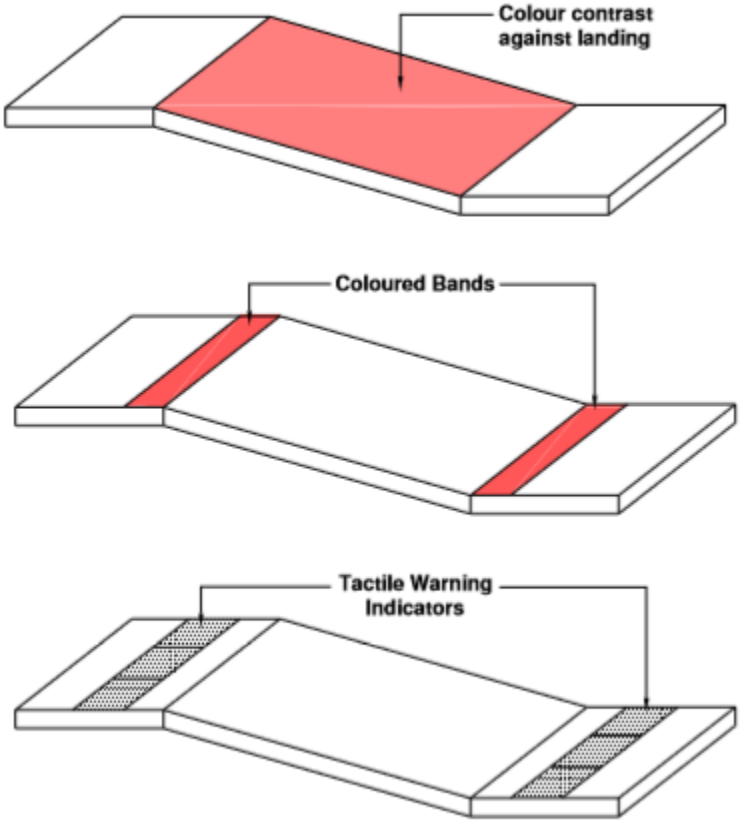


Typical Ramp Design – Slope of 1:15; Width min 1500mm; Landing after every 750mm of height gain; Railing projection by 300mm; Tactile tile warnings 300mm before landing

Ramp with alternative stepped approach



Source: Code on Accessibility 2007: Building & Construction authority



Contrasted colour, coloured bands, tactile warning indicators on ramp.

STEPS AND STAIRS

DIMENSIONS : Treads and Risers in a flight of stairs should be uniform

: Recommended dimensions for riser(step) is 150mm (5.9”) and treads is 300mm (11.8”).

: The maximum height a straight flight of stairs can cover before a landing is 1200mm (47.2”).

: For Public buildings, minimum recommended unobstructed width of a staircase is 1200mm (47.2”) (railing to railing clear dimension)

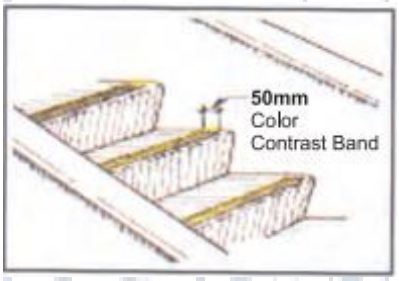
: Landings should be minimum 1200mm (47.2”) deep and equal to the width of the staircase - clear of any obstructions, door swings etc

FEATURES : Nosing to be avoided

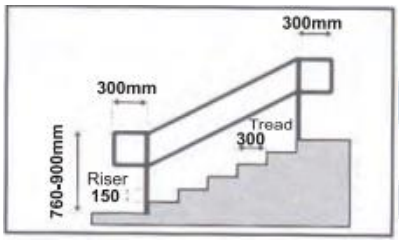
: Anti-skid & contrasting color nosing strip of 50mm (2”) should be provided at every tread

: Continuous handrails should be provided on both sides including the wall (if any) and at two levels – 760mm (29.9”) and 900mm (35.4”).

: Warning Strip in Tactile tiles should be placed 30m (11.8”) before the beginning and end of all stairs.

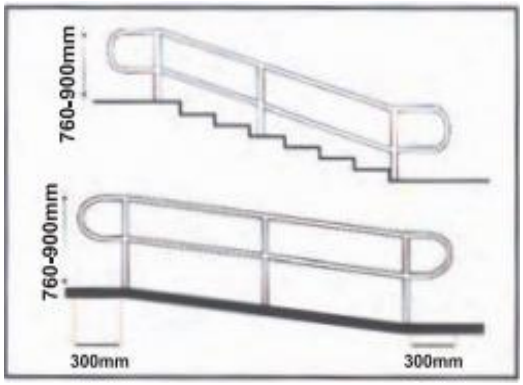


Visible, anti-skid Nosing Band

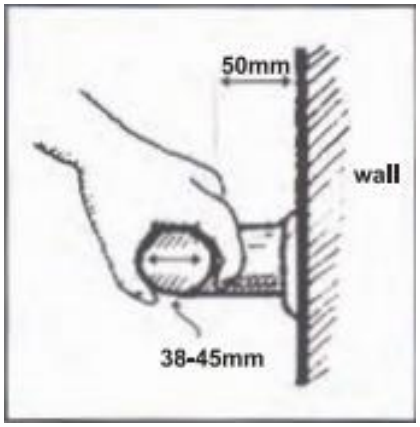


Typical Treads & Risers; Railing Height

Tactile warning



Typical Railing – Ht 900mm & 760mm



Typical Hand rail section

DOORS

DIMENSIONS : Minimum clear opening width of 900mm (35.4”) to be provided. 'Clear opening' is the distance between the open-door shutter and the door frame.

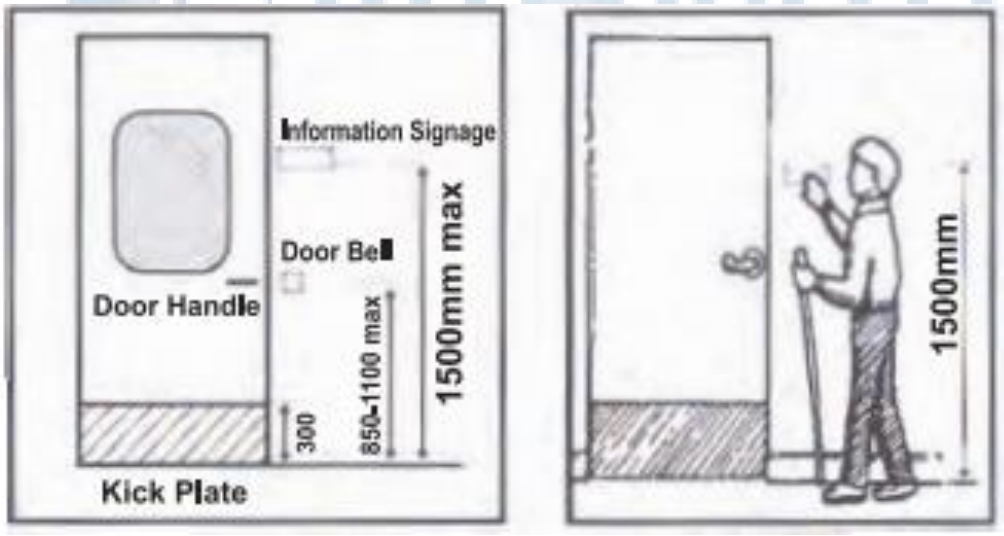
: A distance of 400mm (15.7”) to 600mm (23.6”) should be provided beyond the leading edge of the door to enable a wheelchair user to manoeuvre and reach the handle.

FEATURES : Should be fitted with vision a panel at least between 850mm (33.5”) and 1100mm (43.3”) from the floor level.

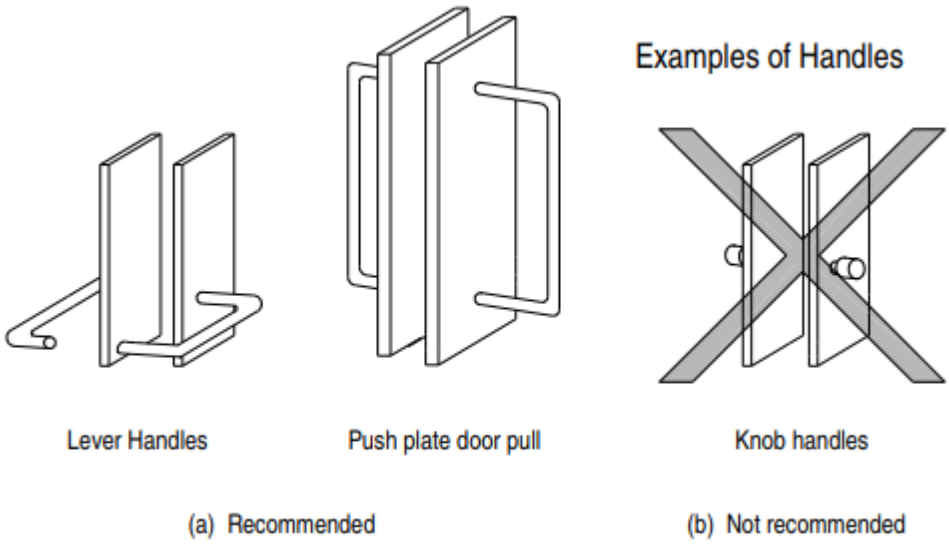
: Should be colour contrasted with the surrounding walls and should not be heavier than 20N to open.

: Doors should preferably be fitted with Mortice (lever action) latch and : locks. The recommended handle is the D shaped handle with a circular section. Ht of mounting of the handle is between 800mm (31.5”) to 1000mm (39.4”).

: Kick plates are recommended till a height of 300mm from the bottom, to resist wear and tear due to wheelchair circulation.



Recommended Door details



Source: Code on Accessibility 2007: Building & Construction authority

FLOORING MATERIAL & USE OF TACTILE FLOORING

(Ground surface of a different texture allowing for guiding/ warning tactile signal for persons with vision impairment)

FEATURES

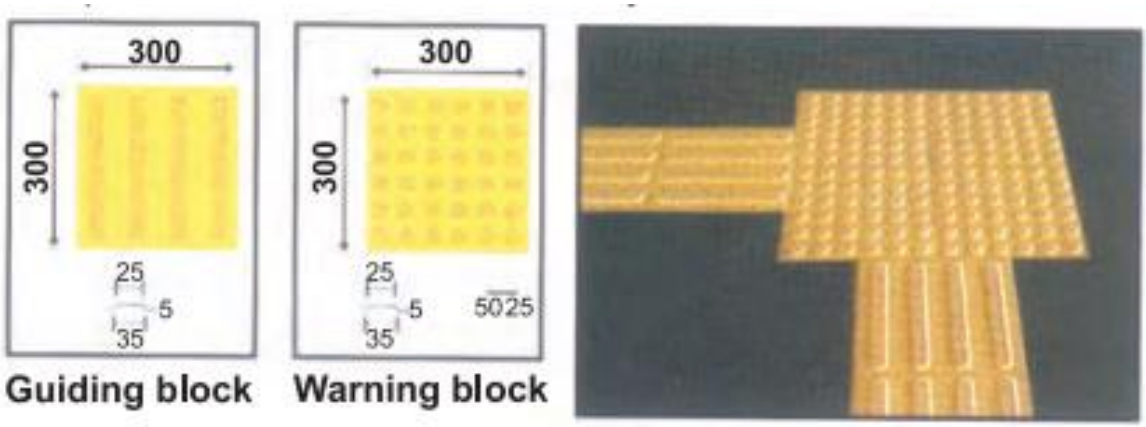
: Flooring materials should be anti-skid and hard wearing

: However, it should be smooth enough for a wheelchair user to easily maneuver the chair without additional effort.

: Usage of Tactile flooring is recommended for blind persons or persons with low vision. The 2 different textures of the tactile pavers act to 'guide' or 'warn' the user

: The Line –type blocks indicate the correct path/route to follow.

: The Dot –type blocks are used as warning signals, to make the user aware of any impending obstacles or possible hazards. They are also used to discourage movement in an incorrect direction and to warn of a corner or junction. They should be placed 300mm at the beginning and end of the ramps, stairs, and entrance to any door.



LIFT AREA

LAYOUT : Lobby space in front of the elevator should be sufficient for the wheelchair to turn.

DIMENSIONS : Elevator door opening should be min 900mm (35.4”) clear

: Ideally, the lift car size should allow the wheelchair to turn, ie min of 1500mm x 1500mm (59.1” x 59.1”)

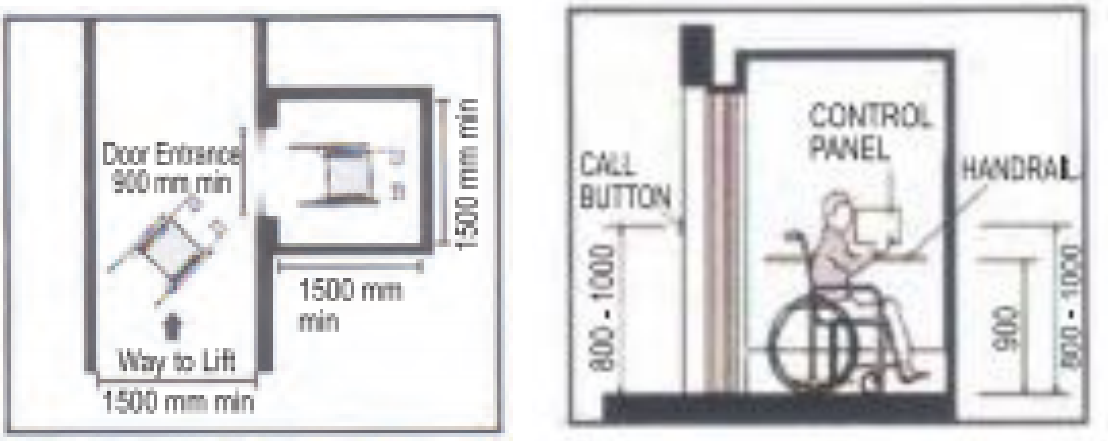
: Height of Hall call buttons and the Control panel inside the Lift car should be between 900mm (35.4”) to 1200mm (47.2”) and on both sides of the elevator door

: Placement of the control panels & hall call buttons should be minimum of 450mm (17.7”) from any corner

FEATURES : The min close time for the elevator door should be adjusted to give adequate entry/ exit time

: Key plans, orientation signs and push buttons in the lift should have text in braille and raised letters.

: Audio and Visual indicators, mirrors, kick plates and railings should be fitted inside the elevator



Recommended Elevator details

TOILETS

Toilets are the most critical and most ignored service provided in Public building. For the wellbeing of PwD's, it is most critical to design toilets for PwD's to the correct dimensions & standards and of the right number. Below are critical guidelines for the design of Accessible Public Toilets.

ACCESSIBLE TOILET

LAYOUT	: Entrance to the toilets should be discreet to maintain privacy
	: Corridor outside the toilet should be sufficient for the wheelchair to turn, i.e. min 1600mm x 1600mm clear finished dimension
	: Recommended clear floor space dimensions are 2200mm x 2000mm (86.6" x 78.7"). Minimum clear dimensions are 2000mm x 1750mm (78.7" x 68.9")
DOOR	: Required architectural opening for the door is 900mm (35.4").
	: Doors should swing outward or be sliding
	: Door should have a horizontal pull bar at least 600mm (23.6") long inside and 140mm (5.5") long on the outside, at a height of 1000mm (39.37").
	: Should be colour contrasted with the surrounding walls and should not be heavier than 20N to open.
FLOORING	: Should have slip resistant flooring.
WASHBASIN	: Min size of a basin is 520mm x 410mm (20.5" x 16.1")
	: Mounting of the basin should be such that the top height is between 700mm - 800mm (27.6"- 31.5").
	: Clear space should be given at the bottom of the basin for the knee space for the wheelchair user - at least 760mm (29.9") wide by 200mm (7.9") deep, by 650mm- 680mm (25.6"-26.8") high.
	: Taking the centerline of the basin, 400mm on either side of the centerline (i.e. total 800mm width) should be unobstructed
	: Basin mixers with lever type controls are preferred
	: Mirrors need to be mounted above the basin. Max. ht for the bottom edge is 1000m (39.4") from the floor. Mirror should be inclined to enable the user to see the complete image till the toes
	: All toilets must have pictograms (male in triangle and female in circle), marked on plates along with Braille & raised alphabets, put on wall next to door at 1400mm-1600mm (55.1"-62.9").
	: The paper towel and soap dispenser along and the hand dryer should be re positioned according to the needs of PwD's
URINALS	: At least one of the urinals should have grab bars, installed on each side and in the front to support semi-ambulant persons (for example bi-lateral crutch users). The front bar is to provide chest support, the side bars are for the user to hold while standing.
	: Urinals shall be stall- type or wall hung, with an elongated rim at a height maximum of 430mm (16.9") above the finish floor.

: A clear floor space 760mm (29.9”) wide by 1220mm (48.03”) deep should be provided in front of urinals to allow forward approach.
: Partitions between Urinals (that do not extend beyond the front edge of the urinal rim) may be provided at a centre-to-centre distance of 750mm (28.9”)

WATER CLOSET (WC)

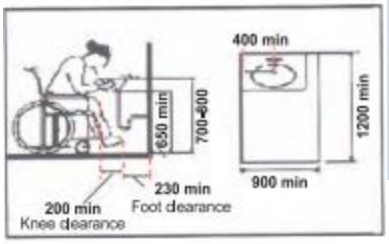
: For a wheelchair user to transfer from the chair to the WC, there are 3 most used methods - parallel transfer, diagonal transfer & front transfer

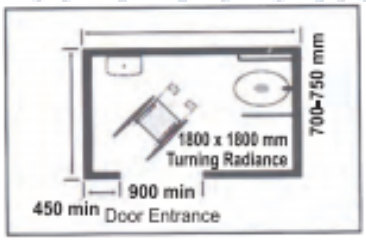
: An unobstructed space 900mm (35.4”) wide should be provided from the edge of the WC to the washbasin/ wall, to facilitate parallel transfer. A space of 1200mm (47.2”) in front of the WC is required for diagonal transfer.
: WC centreline to be located between 460mm (18.1”) to 480mm (18.9”) from the adjacent wall.
: The top of the WC to be 450mm (17.7”) to 480mm (18.9”) from the floor.
: WC should have a back support.
: Grab bars should be provided. On the transfer side U- shape movable type and on the wall side L shaped grab bar is required.

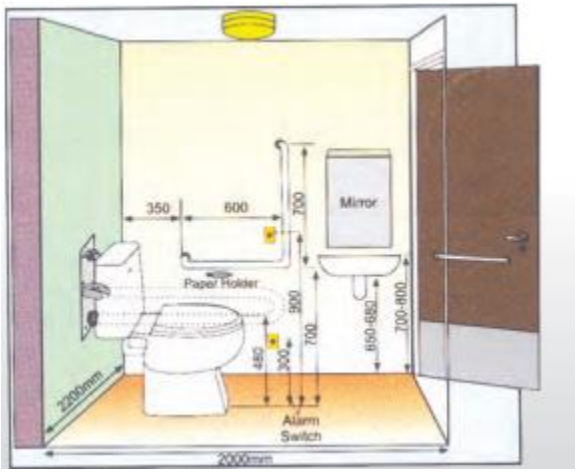
: A small basin should also be fixed on the wall next to the WC for the user to wash hands etc. before transferring back on the wheelchair

ALARM SWITCH

: An alarm switch or pull cord which activates an emergency audio alarm (at the reception/attendant’s desk) should be provided at 900mm (35.4”) and 300mm (11.8”) above floor finish, close to the side wall near the WC and 750mm (29.5”) away from the rear wall.



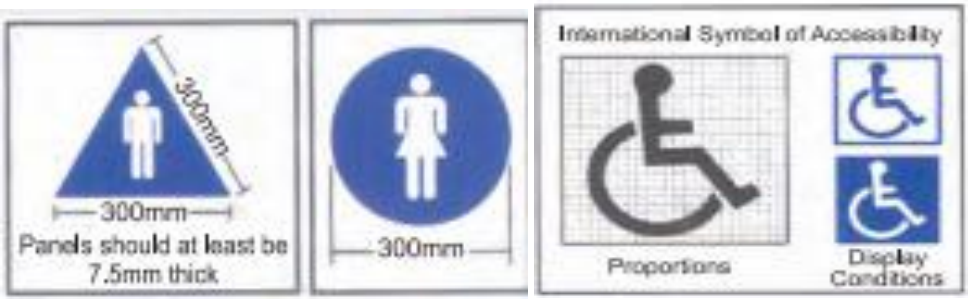




SIGNAGE & COMMUNICATION

Signages are an architects tool to easy and democratic communication within the built environment. All 3 signage types - Identification; Way-finding/ Directional & Information are critical to make the built-form user friendly and accessible to all. Mentioned below are few tenets to make signage universally accessible.

LOCATION	: Located along line of sight : Located along the circulation : All toilets must have signage pictograms (male in triangle and female in circle), marked on plates along with Braille & raised alphabets, put on wall next to door at a height of 1400mm-1600mm (55.1”-62.9”) from the floor.
PLACEMENT HEIGHT	: External – should be mounted 2000mm (78.7”) from the floor for viewing distance of 2000-3000mm (6.6’-9.8’). : Internal – should be mounted on the wall between 1400mm (55.1”) to 1800mm (70.87”) from the floor.
TEXT (all heights are based on the height of the uppercase I)	: For viewing distance of 3M, minimum text height is 25mm : For every subsequent 3M, 25mm is added : Minimum size of Tactile sign lettering is 15mm (0.6”) and Maximum is 50mm (2”). : For the blind persons or persons with low vision, a distinct audio sound (beeper/clapper) may be installed above the entrance door for identification of toilets.
GRAPHICS	: Surface should be Non-reflective : Good color contrast is required between the base surface and the text : International Symbols of Accessibility should be used to mark all Accessible facilities : Tactile Map should be installed near the entrance/reception to orient blind persons or persons with low vision. The letters and signs should be raised at least 1-1.5mm (0.04”-0.06”) from the background.
MISCELLANEOUS	: Signage should be well lit : It should identify locations of all Accessible facilities : Induction Loop system /FM system should be provided for persons with hearing impairment in public dealings, service and information counters, classrooms, auditoriums, cinema halls, conference rooms, etc.



SIGN LANGUAGE INTERPRETERS:

While conversing with individuals who are deaf or hard of hearing, the following organizations can be contacted to send a sign language interpreter:

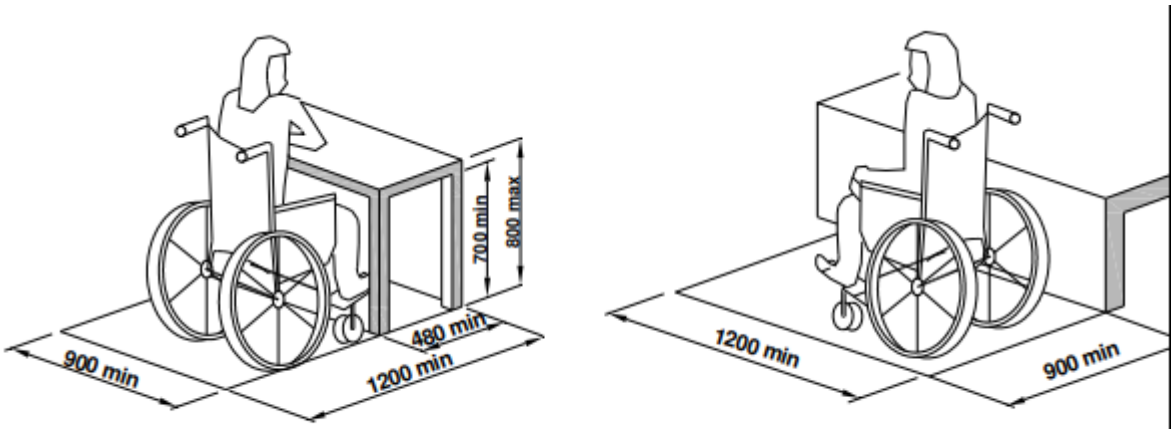
- Indian Sign Language Research and Training Centre (ISLRTC) – government recognized bod under the DEPwD.
- Association of Sign Language Interpreters (ASLI)
- Indian Sign Language Interpreters Association (ISLIA)

PUBLIC DEALING AMENITIES

Most Public amenities are designed for the able-bodied, with the expectation that the PwD will 'adjust' to the same. However, to ensure that Public amenities are Universally designed, it is critical to follow certain Anthropometric criteria for design of the same. Listed below are 2 typical amenities and guidelines to design them for Universal use.

PUBLIC DEAL COUNTERS

DIMENSIONS	: Height of any public dealing counter should not be more than 800mm from the floor, with a minimum clear knee space of 750mm high and 480mm deep. Food and drink offered from mobile trailers can also install a low folding shelf.
	: Clear knee space should be maintained.
LIGHTING	: Lighting should be positioned to illuminate the receptionist and the desk top without creating a glare.
	: Lighting should not create shadows over the receptionist staff, obscuring facial detail and making lip reading difficult.
ACOUSTICS	: Reception area acoustics should be carefully planned and controlled as a high level of background noise is confusing and disorienting to persons with hearing impairment
	: Staff manning the counter should know sign language or provide them with pen and paper so they can communicate on their own.
	: Guiding path through tactile tiles should be provided to guide blind persons or persons with low vision to public dealing counters



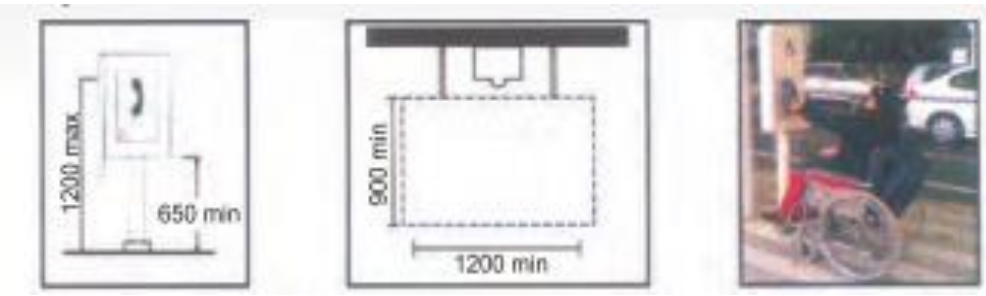
Forward and Side Approach to Table or Counter

Source: Code on Accessibility 2007: Building & Construction authority

PUBLIC TELEPHONES

DIMENSIONS : Maximum height of the highest part of a telephone: 1200mm (47.2”).
: Maximum height of telephone: 800mm – 1200mm (31.5”-47.24”)
: Knee space for wheelchair user: 650mm-680mm (25.6”-26.8”)
: Minimum floor/ground space: 1200mm*900mm (47.2” * 35.4”)

FEATURES : Guiding path through tactile tiles should be provided to guide blind persons or persons with low vision to public telephones.



EMERGENCY EVACUATION

One of the most critical and often ignored design component is that of Emergency Evacuation. In India, most states have their own Fire bye-laws, which may or may not cover alarm & evacuation for PwD's. Few of the critical Do's are tabulated below.

SIGNAGE	: Maps for emergency evacuation should be located next to the building reception, in the elevator lobbies and at areas of heavy circulation.
	: These Maps should also be tactile for use by blind persons or persons with low vision, with the users' current location clearly identified
	: Strobes and Audible emergency alarms should be provided
	: Fire escape signage should be well illuminated and as per local codes
PROTOCOL	: In Hotel properties, the lowest guest floor should have the Accessible rooms. They should be close to the Fire escape. If possible, a refuge area should be provided on the same floor for wheelchair users to escape to in case of Fire/ Emergency
	: Fire lifts should be provided in all buildings which are ground and above
	: They should be identified in the Maps for emergency evacuation
	: Protocol for evacuation of PwD's should also be mentioned in the Emergency evacuation maps. Protocol should be as per the most stringent bye-laws available in the country (currently being used by the State of Delhi)

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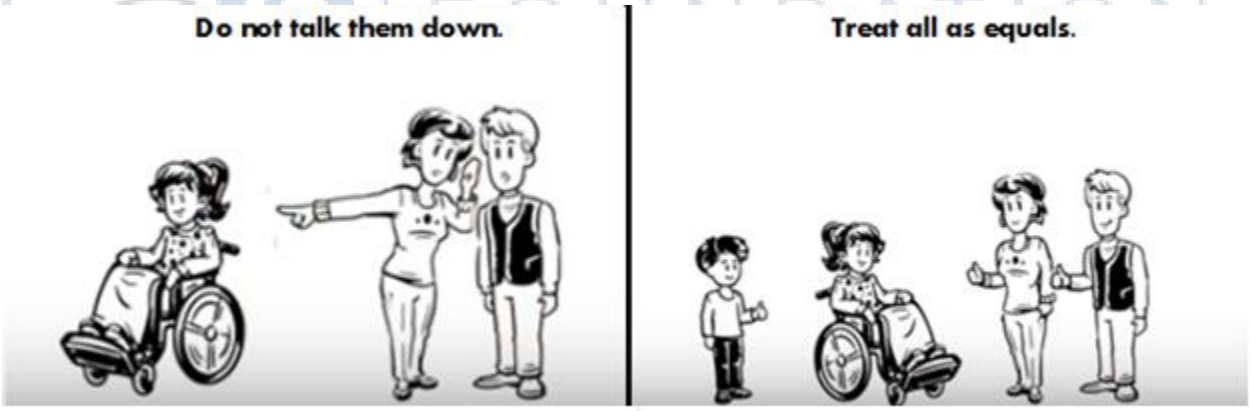
ATTITUDES TOWARDS PEOPLE WITH DISABILITIES

Interacting with People with disabilities

Misinformation and assumptions often cloud the attitude towards people with disabilities (PwD's). Negative attitudes towards PwD's continue to challenge their full and equal participation in society. Disrespectful or patronizing language and/or behaviour may cause offense and may indirectly or directly impact the inclusion of people with disabilities. Hence, one should always practice basic etiquettes towards the PwD's. Below are some general instructions for conducting yourself while communicating with a person with disability:

- Pay attention to what they can do. Do not talk them down by mistaking them to be stupid.
- Be considerate but treat all as equals.
- Maintain dialogue at an adult to adult level. Be considerate but never patronize them.
- Interact with them directly and not with those accompanying them.
- Discuss and ascertain the required modifications to your workplace by working with people with disabilities.
- Apologizing for expressions used in everyday language like 'I got to run' or 'see you later' may cause offense. Hence, conversation should be as normal as possible such that you need not remind them of their disability.
- Always ask before offering help. Never assume that people with disabilities always require help.



Source: ACT

By improving your communication along with basic environmental modifications, every individual should avoid expressing any unintentional bias against the PwD's. Usage of the following words may not foster positive and respectful communication:

- People with disabilities should neither be stereotyped or shown pity by usage of words like '**victim**', '**afflicted with'** or '**sufferer**', nor be described as **inspirational or courageous** because of their disability. It is wrong to assume that using a wheelchair is a misfortune.
- The person precedes the disability both literally and figuratively. For example,

Desirable	Non- desirable
People with disabilities	Disabled person
''She is epileptic or an epileptic person''	''She has epilepsy"

- One should also not use derogatory labels such as '**defective**', '**handicapped',** '**crippled'**, '**physically disabled'**, '**differently-abled', 'mute'** or **'invalids'**. Using 'persons/people with disabilities' is deemed appropriate.
- An individual using a wheelchair should be appropriately referred to as a 'wheelchair user' and not someone who is '**wheelchair bound'** or **'confined to a wheelchair'**.

Following is a suggestive list of reference terms whose usage is recommended. Please note that this is not an exhaustive list.

- ✓ People with disabilities
- ✓ Visually impaired
- ✓ Hearing impaired
- ✓ People who are blind
- ✓ Low vision
- ✓ People who are deaf
- ✓ Hard of hearing
- ✓ Wheelchair user
- ✓ Non – disabled (for people who do not have disabilities)
- ✓ Intellectual disability
- ✓ Accessible parking
- ✓ Someone with an amputation
- ✓ Amputee
- ✓ Learning Disability
- ✓ Speech and Language disability

FOR THE DEAF/HARD OF HEARING

Impairments may include those that scale from mild to complete hearing loss. Individuals with hearing loss may use hearing aids, cues from lip reading, sign language or a combination to assist with communication.

- It is advisable to use a qualified sign language interpreter, if possible. Make eye contact with deaf and hard of hearing instead of the sign language interpreter.
- Always use a method of communication most suitable and comfortable for a deaf or hard of hearing i.e. writing, speaking, sign language or the use of gestures.
- Writing may be used in case of simple interaction.
- You may draw their attention by either extending your arm, waving your hand, taping lightly on their shoulder or flicking the light depending on the situation.
- Always speak clearly and slowly but without exaggerating your lip movements to make it easier for them to take cues from the lip movements. Avoid hand obstruction or chewing gum.
- In case of mild hearing loss, do not shout to make yourself heard. Individuals with mild hearing loss often use hearing aids and shouting would distort the words.
- Ask the deaf and hard of hearing individual for their advice on how they wish to be communicated with you.

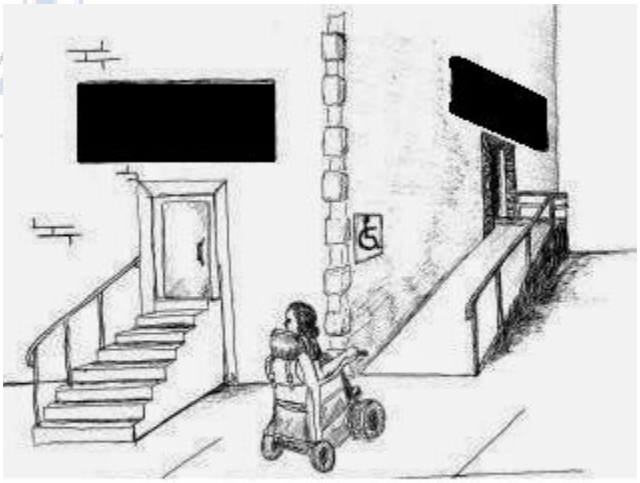
Do not shout while talking to a person with hearing impairment.

FOR PEOPLE WITH LOCOMOTOR DISABILITIES

The physical functioning, mobility and skilfulness of an individual can get affected due to locomotor disabilities. At times, physical disabilities may be clubbed with other medical or neurological problems. For example, individuals suffering from cerebral palsy, “a persistent disorder of movement and posture that develops due to a non-progressive disorder of the brain”, often experience involuntary movements and have slurry speech.

Wheelchairs or other mobility devices like crutches, canes etc. are a part of the user. Mishandling the same might put the user in an uncomfortable situation.

- Never lean over the wheelchair or set your drinks over the desktop attached to the wheelchair.
- Do not lean on the wheelchair user to shake hands with others.
- Do not disregard their opinion due to their appearance. Always monitor your responses.
- Never push or touch the wheelchair without due permission. It may also harm the user or detach parts of the wheelchair.
- Do not order or request them to hold your coat.
- Ensure all the ramps and accessible doorways in the premises are unlocked and unblocked. Waste baskets and storage boxes should never be placed on the ramp or on the ramp entry.
- The premises should have clear and visible signs directing people to accessible facilities like doorways, ramps, lifts etc. Directions to the staircase should also be clearly shown as individuals using canes or crutches prefer staircase over ramps.
- Be seated while speaking to a wheelchair user in case of a conversation lasting more than 10 minutes. In case of brief conversations, maintain slight distance. This way the wheelchair user does not have to strain their eyes.
- Place items within reach of the wheelchair user and a clear path devoid of protruding racks or shelves should be maintained.
- The service counters in the premises should have appropriate height for a wheelchair user to self-access the facilities. If not, the service provider should step around the counter to do the needful.
- Never open or push a door unexpectedly from behind as an individual using a cane or a crutch might fall as they often use it for support.



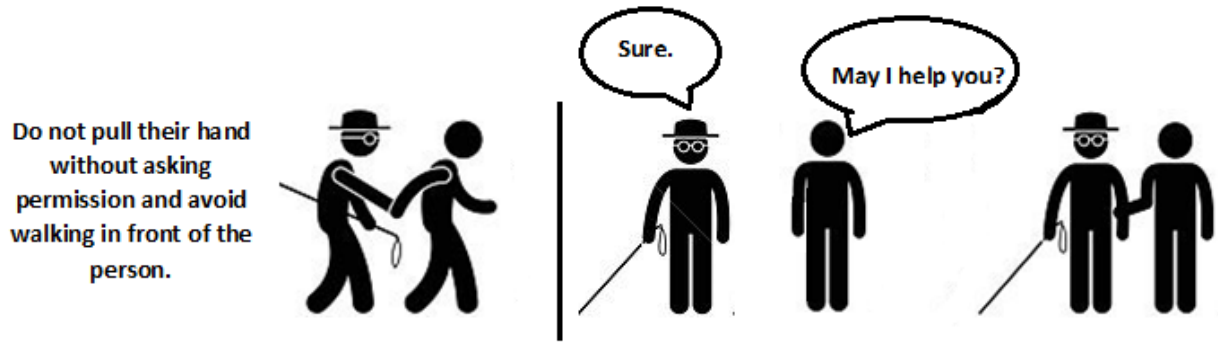
The facility should have clear signs to direct individuals towards accessible facilities.

FOR PEOPLE WITH LOW VISION/TOTAL BLINDNESS

These disabilities might be congenital or be acquired. The various categories and their implications are illustrated in the table below:

LOW VISION	TOTALLY BLIND
May be defined as: ➢ Visual acuity not exceeding 6/18 or less than 20/60 upto 3/60 or upto 10/200 (Snellen) in the better eye with best possible corrections; or ➢ Limitation of the field of vision subtending an angle of less than 40 degree upto 10 degree.	May be defined as: ➢ Total absence of sight; or ➢ Visual acuity less than 3/60 or less than 10/200 (Snellen) in the better eye with best possible correction; or ➢ Limitation of the field of vision subtending an angle of less than 10 degree.

- While communicating with people with any kind of blindness, always identify yourself and use their name to alert them of you speaking to them. Inform them before leaving.
- Ask if any help is required for any physical activity, walking or otherwise. Never take their arm without asking for permission.
- Give a detailed tour of your facility and duly orient them.
- If one has visited your facility before, notify them in case of any infrastructural changes or changes in the interiors. Give specific, non-visual information while describing the setting to them. Forewarn them of any obstacles (Ex. Direction of the staircase going up or down, crack along the side of walls, revolving doors, etc.).
- To start walking with a person with blindness, allow the person to hold the back of your elbow so that you remain ahead of them.
- Try to keep warning messages as precise and direction specific as possible instead of using jargons.
- Do not encroach in their personal space by touching their cane. One should never touch their cane without asking for permission as it's an extension of their body.
- While serving water/food, make sure to inform them about the exact position of the plate/glass using clock orientation. (12'o clock is farthest for an individual with visual impairment and 6'o clock is the nearest)
- In case of meetings scheduled with people with visual impairment, one should always assign an individual to accompany them instead of giving directions yourself.



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AFFORDABILITY

From time to time, People with disabilities (PwD's) may need services ranging from small, low priced aids to advanced and costly ones. Thus, PwD's and their families are more susceptible to social and economic disadvantage as opposed to those without disability.

PwD's may incur extra costs which may be direct, indirect or opportunity costs:

- Direct costs of treatment (inclusive of travel and access)
- Indirect costs to caretakers (not directly affected)
- Opportunity costs due to income lost from incapacity.

Depending on the resident city, these economic and social costs may lead to poverty through multitude of channels such as –

- Medical care expenses
- Costs related to assistive devices.
- Access to other aids and improvement.
- Personal support and assistance
- Lack of employment opportunities
- Transport inaccessibility – Lack of low floor buses, railways and ferries etc.
- Infrastructural inaccessibility – Lack of ramp curbs, lifts, accessible toilets etc.

Since, most of these costs stem from inaccessible environments, they could be reduced by promoting inclusive settings everywhere. This can be successfully carried out by keeping in mind some of the recommendations enlisted below:

Disclaimer: This list contains only some recommendations and is not exhaustive.

- Making it mandatory for commercial enterprises above an agreed size to get an Accessibility No Objection Certificates (NOC) like the Fire NOC's that are already mandated before they get a Completion Certificate.
- Common accessibility issues pertaining to mobility and transport facilities should be addressed. This include:
    - Accessible underpasses and overpasses.
    - Accessible crossings, kerbs and footpaths
    - Para transit services
    - Appropriate and maintained tactile maps and signages.
    - Pedestrian access
- Accessible schools, hospitals and hospices.
- Training and sensitization of doctors and medical staff.
- Mandate insurance companies to cover persons with disabilities and those with pre-existing conditions.

- Setting up of ITIs/training centers to train attendants and caretakers for PwD's s and the elderly.
- State Tax exemptions on procurement of any kind of aid, mode of transport for PwD's s
- Subsidization of education, healthcare and attendant costs for PwD's.
- Create mechanisms to ensure the reserved quote of PwD's employment seats in government jobs are filled.

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ABOUT NIPMAN FOUNDATION

Nipman Foundation, founded in 2012 by Nipun and Priyanka Malhotra, works towards empowering Persons with Disabilities in India.

Nipman Foundation is the accessibility partner of Confederation of Indian Industry and conducts Access Audits for some of India's leading business houses like the Tata's. Nipman Foundation has also conducted workshops and given presentations at Deloitte, Accenture, Goldman Sachs etc. We're access partners to the Jaipur Literary Festival, Serendipity Arts Festival and NH7 Weekender. We worked with India's biggest restaurant aggregator Zomato to add wheelchair access filters to restaurants.

Nipman Foundation runs a crowd-sourcing platform connecting donors to those who cannot afford wheelchairs, Wheels for Life (www.wheelsforlife.in). We have distributed wheelchairs across eight states and have over twenty distribution partners.

Nipman Foundation's flagship event, the 'Equal Opportunity Awards' recognizes organizations that make a significant contribution to persons with disabilities in the workspace and in enhancing their life. The 2017 edition saw sixty-eight applicants from all over the country.