A. GENERAL PROVISIONS

1. Accessible Ramps

1.1 Changes in level shall require a ramp except when served by a dropped sidewalk, curb ramp, an elevator, or other mechanical device.

1.2 Accessible ramps shall have the following facilities and features:
   1.2.1 Minimum clear width of 1.20 m.
   1.2.2 Gradient not steeper than 1:12.

---

**Fig. A.1.1**

**Fig. A.1.2**

DESIGN OF RAMP WIDER THAN 1.20 M. BUT NOT LESS THAN 3000 mm. REQUIRING INTERMEDIATE HANDRAILS
1.2.3 For accessible ramps 3m or more in width, provide intermediate handrails at the center. Use of double “J” type handrail supports are recommended.

1.2.4. Maximum length of 6.00 m.: Accessible ramps with a total length longer than 6.00 m shall be provided with intermediate landings with a minimum length of 1.50 m.

1.2.5 Level area not less than 1.80 m at the top and bottom of any ramp.

1.2.6 Handrails on both sides of the ramp at 700 mm and 900 mm from the floor of the ramp. (See Fig. A.4.1; A.4.2)
1.2.7 300 mm long extension of the handrail shall be provided at the top and bottom of ramps.
1.2.8 Curbs on both sides of the ramp with a minimum height of 100 mm.

Fig. A.1.5 CURB HEIGHT AT RAMP

1.3 Any ramp with a rise greater than 170 mm and leads down towards an area where vehicular traffic is possible, should have a railing across the full width of its lower end, not less than 1.80 meters from the foot of the ramp.

Fig. A.1.6 RAMPS & VEHICULAR TRAFFIC
2. Slip Resistant Materials

2.1. Slip resistant materials shall have a Coefficient of Friction of 0.6 for level surfaces and 0.8 for sloping surfaces (ASTM).

2.2. If carpets or carpet tiles are used on a floor surface:

   2.2.1. it shall be securely attached;
   2.2.2. have a firm cushion, pad, or backing;
   2.2.3. have a level loop, textured loop, level cut pile, or level cut/uncut pile texture;
   2.2.4. maximum pile thickness shall be 13 mm;
   2.2.5. Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge;
   2.2.6. Carpet edge trim shall comply with 4.5.2. Appendix Note (ADA).

3. Handrails and Grab Bars

3.1. Handrails shall be required for accessible ramps for changes in grade higher than 170 mm.

3.2. Handrails shall be installed at both sides of ramps and stairs. Handrails may be provided at dropped sidewalks but should not be installed beyond the width of any crossing so as not to obstruct pedestrian traffic.

3.3. Handrails shall be installed at 900 mm and 700 mm above stairs or ramps.

Fig. A.3.1
3.4. Railings for protection should be installed at a height of 1100mm minimum, measured from the top of the rail to the finish floor for ramps, balconies, landings or porches which are more than 750 mm above adjacent grade. These shall be installed in addition to the handrails required for accessible ramps (Section C, Item 2). (per NBC Rule XII under Guard Rails.)

3.5. A 300 mm long extension of the handrail shall be provided at the top and bottom of ramps and stairs.

3.6. Handrails and grab bars that require full grip should have an outside diameter of 38 mm (minimum) to 45 mm (maximum).

3.7. Handrails attached to walls should have a minimum clear distance of 50 mm from the wall. Handrails on ledges should have a minimum clear distance of 40 mm.

3.8. Stair handrails shall be continuous throughout the entire length and around landings less than 2100 mm in length, except where it is
intercepted by an alternative path of ravel or has an entry door leading into it.

4. Parking

4.1. Accessible Parking Slot Requirement

Where parking spaces are required to be provided, the number of accessible parking lots for vehicles driven by persons with disabilities or vehicles with passengers with disabilities shall be in accordance with Table B.1.1 below:

<table>
<thead>
<tr>
<th>TOTAL NUMBER OF PARKING SLOT</th>
<th>REQUIRED NUMBER OF ACCESSIBLE PARKING SLOTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 25</td>
<td>1</td>
</tr>
<tr>
<td>26 – 50</td>
<td>2</td>
</tr>
<tr>
<td>51 – 75</td>
<td>3</td>
</tr>
<tr>
<td>76 – 100</td>
<td>4</td>
</tr>
<tr>
<td>101 – 150</td>
<td>5</td>
</tr>
<tr>
<td>151 – 200</td>
<td>6</td>
</tr>
<tr>
<td>201 – 300</td>
<td>7</td>
</tr>
<tr>
<td>301 – 400</td>
<td>8</td>
</tr>
<tr>
<td>401 – 500</td>
<td>9</td>
</tr>
<tr>
<td>501 – 1000</td>
<td>2% OF TOTAL SPACES</td>
</tr>
<tr>
<td>1001 - OVER</td>
<td>20+ (1 FOR EACH 100 OR A FRACTION THEREOF OVER 1000)</td>
</tr>
</tbody>
</table>

Table A.4.1 ACCESSIBLE PARKING SLOT REQUIREMENT

The building management should impose appropriate sanctions for the unauthorized use of the reserved parking slots for vehicles of PWDs.

4.2. Parking slots for persons with disabilities should allow enough space for a person to transfer from a vehicle to a wheelchair.

4.3. Accessible parking slots shall be located nearest to accessible main entrances.

4.4. PWDs should be on board the vehicle to be able to use the reserved parking space for PWDs (for control use). In addition, an access parking sticker/card is required with control number.

4.5. Whenever and wherever possible, accessible parking slots should be perpendicular or to an angle to the road or circulation aisles.

4.6. Parallel parking is discouraged unless it can be situated so that persons entering and exiting vehicles will be out of the flow of traffic.

4.7. Accessible parking slots shall have:
   4.7.1 A minimum width of 3.70 m and a length of 5.00 m.
   4.7.2 A walkway with a minimum clear width of 1.20 m. provided between the front ends of parked cars.
   4.7.3 Dropped sidewalks or curb ramps leading to the parking level where access walkways are raised.
Fig. A.4.1: ACCESSIBLE PARKING SLOT (PLAN)

Fig. A.4.2: ACCESSIBLE PARKING SLOT (3D VIEW)

4.7.4 Pavement markings, upright, pole mounted signages
4.7.5 Have a firm, level surface without aeration slabs.

Fig. A.4.3: ACCESSIBLE PARKING SLOT (SHOWING UPRIGHT/POLE MOUNTED SIGNAGE)
4.8. Parking slots for persons with disabilities shall never be located at ramped or sloping areas.

4.9. For multi-storey indoor parking structures, accessible parking slots shall be located right next to accessible elevators, or as close as possible to accessible pedestrian entrances.

4.10. In buildings with multiple accessible entrances with adjacent parking, accessible parking slots shall be dispersed and located closest to the accessible entrances.

4.11. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility.

4.12. For all accessible parking slots, provide the following signage:

4.12.1 Pole mounted parking signage, 600 mm x 600 mm in size and mounted at a minimum clear height of 2.00 m from the parking floor.

4.12.2 Pavement sign painted or marked on the designated lot complying with the following:

(a) a square with dimensions of at least 1.00 m but not more than 1.50 m;

(b) be located in the center of the accessible parking slot;

(c) The International Symbol of Access shall be composed of a white symbolized figure of a person in a wheelchair with a square background in UN Blue Color. The symbolized figure shall always face to the right.

Note: An intercom may be installed at the vicinity of the accessible parking slot to enable persons with disabilities to call the building management for assistance.

5. **Signages**

5.1. **Symbol of Access**

The International Symbol of Access shall be composed of a white symbolized figure of a person in a wheelchair with a square background in UN Blue Color. The symbolized figure shall always face to the right. Provide directional arrows when the space/area/function being referred to is facing left.
5.2. Directional and information (Audio, Visual, and Tactile) signages shall be located at points that can be conveniently seen, heard, and felt by all persons with disabilities.

**Table A.5.1**

<table>
<thead>
<tr>
<th>Viewing Distance (m)</th>
<th>Size (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 7.0</td>
<td>60 x 60</td>
</tr>
<tr>
<td>7.0 to 18.0</td>
<td>100 x 100</td>
</tr>
<tr>
<td>Above 18.0</td>
<td>200 x 200 to 450 x 450</td>
</tr>
</tbody>
</table>

**Height of Letters**

<table>
<thead>
<tr>
<th>Required Viewing Distance (m)</th>
<th>Minimum Height of Letters (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>50</td>
</tr>
<tr>
<td>2.0</td>
<td>60</td>
</tr>
<tr>
<td>2.5</td>
<td>100</td>
</tr>
<tr>
<td>3.0</td>
<td>120</td>
</tr>
<tr>
<td>4.5</td>
<td>150</td>
</tr>
<tr>
<td>6.0</td>
<td>200</td>
</tr>
<tr>
<td>8.0</td>
<td>250</td>
</tr>
</tbody>
</table>
5.3. Signages should be kept simple and easy to understand. Signages should be made of contrasting colors and contrasting gray value to make detection and reading easy. Tactile maps shall be provided to guide persons with visual impairment.

5.4. The International Symbol of Access should be used to designate routes and facilities that are accessible in combination with pictographs. Directional signs incorporating the INTERNATIONAL SYMBOL OF ACCESS, as shown in Figure A.5.1, shall be installed at passageways, and at points where there are changes in direction to lead persons with disabilities to various facilities such as lifts/elevators, entrances, telephone booths, toilets, parking and the like.

5.5. Should a sign protrude into a sidewalk/walkway or route, a minimum vertical clearance of 2.00 m should be provided. Obstacles, projections or other protrusions shall be avoided in pedestrian areas such as sidewalks/walkways, halls, corridors, passageways or aisles. Pedestrians with visual impairments often travel using the edge of the building line, hence, objects mounted on walls, posts, or sides of buildings, should therefore not protrude more than 100 mm into sidewalks/walkways and corridors.

5.6. Signs (graphics, text, and Braille) on walls and doors should be installed at a maximum height of 1.50 m from the finish floor to the center of the sign.
5.7. Signs shall incorporate graphic, text, and Braille.

Fig. A.5.4

5.8 Signs and labels for public rooms, areas, and places should have tactile symbols, letters or numbers that should be embossed with a minimum height of 1 mm; Braille symbols shall be incorporated in signs indicating public places and safety routes.

5.9 Tactile Ground Surface Indicators
Positional, directional, and warning tactile blocks must be provided to warn people with visual impairments that they are approaching:

5.9.1 Stairways, other than fire exit stairs
5.9.2 Escalators
5.9.3 Passenger conveyors or moving walks
5.9.4 Ramps other than fire-exit ramps, curb ramps, swimming pool ramps
5.9.5 In the absence of suitable protective barriers:
   a. overhead obstructions less than 2.0 m above floor level
   b. areas where pedestrian and vehicular traffic intersect.

6.0 Tactile warning indicators should have a 50% contrasting gray value from adjacent floor finishes.

a. Tactile Maps

Character Proportion

- Tactile letters and numbers on signs shall have a width to height ratio between 3:5 and 1:1 and a stroke width to height ratio between 1:5 and 1:10

Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)

- Letters and numerals shall be raised 0.75mm, upper case, sans serif or simple serif type and shall be accompanied with Grade 2 Braille. Raised characters shall be at least 16mm high, but no higher than 50mm. Pictograms shall be accompanied by the
equivalent verbal description placed directly below the pictogram. The border dimension of the pictogram shall be 150mm minimum in height.

**Finish and Contrast**

- The characters and background of signs shall be eggshell, matt or other non-glare finish. Characters and symbols shall contrast with their background – either light characters on a dark background or dark characters on a light background.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PURPOSE</th>
<th>DESCRIPTIVE TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARNING TACTILE BLOCKS</td>
<td>- INDICATION OF POTENTIAL HAZARDS AHEAD</td>
<td>GRID PATTERN</td>
</tr>
<tr>
<td>POSITIONAL TACTILE BLOCKS</td>
<td>- INDICATION OF POSSIBLE CHANGE IN WALKING DIRECTIONS.</td>
<td>STAGGERED</td>
</tr>
<tr>
<td>DIRECTIONAL TACTILE BLOCKS</td>
<td>- INDICATION OF INTENDED SAFE PATH.</td>
<td>STRIPS</td>
</tr>
</tbody>
</table>

Table A.5.2

**b. Tactile Floor Surfaces**

![Fig. A.5.5](image.png)

![Fig. A.5.6](image.png)
SAMPLE USAGE OF TACTILE SURFACES

6. Stairs

6.1 Uniform risers of 150 mm (maximum) and treads of 300 mm (minimum) shall be used.
6.2 Tread surfaces shall be of slip-resistant material; nosings shall be slip resistant to further minimize slipping.
6.3 Slanted nosings are preferred than protruding nosings so as not to pose difficulty for people using crutches or braces whose feet have a tendency to get caught in protruding nosings.
6.4 Open stringers shall be avoided.
6.5 The leading edge of each step on both runner and riser should be marked with a paint or non-skid material that has a color and gray value which is in high contrast to the gray value of the rest of the stairs.
6.6 A tactile strip 300 mm wide shall be installed before hazardous areas such as sudden changes in floor levels and at the top, bottom and intermediate landings of stairs; special care must be taken to ensure the proper mounting or adhesion of tactile strips so as not to cause accidents.

6.7 Handrails shall be installed at 900 mm and 700 mm above stair treads. A 300 mm long extension of the handrail should be provided at the top and bottom, of stairs.

6.8 Stair handrails shall be continuous throughout the entire length and extend not less than 300 mm beyond the top and bottom step.

![Fig. A.6.1](image)

![Fig. A.6.2](image)
B. OUTSIDE AND AROUND BUILDINGS

1. Dropped Sidewalks

1.1 Dropped sidewalks should be provided at pedestrian crossings and at the end of walkways of a private street or access road.

1.2 Dropped sidewalks at crossings shall have a width corresponding to the width of the crossing.

1.3 For crossings and walkways less than 1.50 m. in width, the base/level surface at the bottom of the ramp shall have a minimum depth of 1.50 m. with a width corresponding to the width of the crossing.

For crossings and walkways less than 1.50 m. in width, the base/level surface at the bottom of the ramp shall have a minimum width corresponding to the width of the crossing (4.00 M minimum for national roads and as mandated by Local ordinances for local roads).

FIG. B.1.1 Perspective of Dropped Sidewalk
Fig. B.1.2: Plan of DROPPED SIDEWALK

Fig. B.1.3a: VARIATION OF DROPPED SIDEWALK AT CORNER

Fig. B.1.3b: OTHER VARIATION OF DROPPED SIDEWALK AT CORNERS
1.4 Dropped sidewalks shall be sloped towards the road with a maximum cross gradient of 1:100 (1%) to prevent water from collecting.

![Diagram of Dropped Sidewalk and Curb Ramp](image)

Fig. B.1.4: SECTION OF DROPPED SIDEWALK

1.5 The difference in elevation between the base/level area of a dropped sidewalk from the road or gutter shall not exceed 19 mm.

1.6 Provide the following signage:
   1.6.1 Pole mounted signage, 600 mm x 600 mm in size and mounted at a minimum clear height of 2.00 m from the sidewalk floor. Pole mounted signs (planted) should not obstruct the path of pedestrians. {Refer to DPWH Guidelines (Road Signs and Pavement Marking Manual) for installing pole mounted signs on sidewalks.}
   1.6.2 Pavement sign painted or marked on the ramp complying with the following:
      (a) a square with dimensions of at least 600 mm (for ramps less than 1.20 m wide) but not more than 800 mm (for ramps 1.20 m. and wider);
      (b) be located at the center of each ramp;
      (c) the color of the International Symbol of Access shall be white on a blue background.

2. Curb Ramps

2.1 Curb ramps shall only be allowed when it will not obstruct a sidewalk/walkway or in any way lessen the width of a sidewalk/walkway or lessen the level/turning area of 1.50 m x 1.50 m. Curb ramps shall only be allowed if the width of sidewalks/walkways
are more than 3.30 m with a corresponding curb height of 150 mm, otherwise dropped sidewalks shall be used.

2.2 For drop off points for persons with disabilities at loading bays, the minimum width of a curb ramp should be 900 mm.
2.3 Curb ramps shall have a gradient not steeper than 1:12.

2.4 Provide the following signage:

2.4.1 Pole mounted signage, 600 mm x 600 mm in size and mounted at a minimum clear height of 2.00 m from the sidewalk floor. Pole mounted signs (planted) should not obstruct the path of pedestrian. (Refer to DPWH guidelines for installing pole mounted signs on sidewalks.)
2.4.2 Pavement sign painted or marked on the ramp complying with the following:
(a) a square with dimensions of at least 600 mm (for ramps less than 1.20 m wide) but not more than 800 mm (for ramps 1.20 m. and wider);
(b) be located in the center of the ramp;
(c) the color of the International Symbol of Access shall be white on a blue background.

3. Sidewalks and Walkways

3.1 The gradient along the length of sidewalks/walkways should be kept as level as possible and shall make use of slip resistant material. **Slip resistant materials shall have a Coefficient of Friction of 0.6 for level surfaces and 0.8 for sloping surfaces (ASTM).**

3.1 Whenever and wherever possible, sidewalks/walkways should have a gradient not steeper than 1:20 or 5%.

3.2 Sidewalks/walkways should have a maximum cross gradient of 1:100 or 1%.

3.3 Sidewalks/walkways shall have a minimum width of 1.20 meters.

3.4 If possible, gratings should never be located along sidewalks/walkways. When occurring along sidewalks/walkways, grills of grating openings shall:
   a. be perpendicular to line of travel
   b. have a maximum center to center dimension spacing of 13 mm between members;
c. not project nor be recessed more than 6 mm above or below the level of the sidewalk/walkway.

3.5 Sidewalks/walkways should have a continuing surface without abrupt pitches in angle or interruptions by cracks or breaks creating edges above 6 mm.

![Gratings Diagram](image)

**Fig. B.3.2: GRATINGS**

3.6 In lengthy or busy sidewalks/walkways, spaces should be provided at some point along the route so that a wheelchair may pass another or turn around. These spaces should have a minimum clear dimension of 1.50 m and should be spaced at a maximum distance of 12.00 m between rest stops.

![Rest Stop Diagram](image)

**Fig. B.3.3: REST STOP ON BUSY OR LENGTHY SIDEWALK / WALKWAYS**

3.7 To guide the person with visual impairment, sidewalks/walkways should as much as possible follow straightforward routes with right angle turns.
3.8 Where planting is provided adjacent to the sidewalk/walkway, regular trimming is essential to ensure that branches of trees or shrubs do not extend beyond sidewalks/walkways or paths, as not only do these present a particular danger to the person with visual impairment, but they also reduce the effective sidewalk/walkway width available to pedestrians in general.
3.9 Sidewalk/walkway headroom should not be less than 2.00 m and preferably higher.

3.10 Sidewalks/walkways should not be obstructed by street furniture, bollards, sign posts or columns along the defined route as they can be hazardous to persons with disabilities.

4. Open Spaces

4.1 Where open spaces are provided, persons with visual impairment can become particularly disoriented. Therefore it is extremely helpful if sidewalks/walkways or paths can be given defined edges either through the use of planters with dwarf walls, or a grass verge, or similar, which provides a texture different from the path. Tactile surfaces/markings should be provided.

4.2 Provide Pedestrian Dominated Priority Zones in commercial complexes, to create a feeling of safety particularly persons with disabilities.
5. Crossings

In order to reduce the exposure time to vehicular traffic, all crossings at grade shall:

5.1 Be as perpendicular as possible to the carriageway.
5.2 Be located at the narrowest, most convenient part of the carriageway for mid-block crossings.
5.3 Have a median/island of at least 1.5 m in depth, preferably 200 mm, provided as a pedestrian refuge, where the width of carriageway to be crossed exceeds 10.0 m or at least 4 lanes.

![Diagram of a pedestrian crossing](image)

**Fig. 5.1.1**

5.4 Pedestrian crossings shall not be located at street corners but at a minimum distance of 2000 mm from the corner.
5.5 Provide directional tactile strips in the immediate vicinity of crossings as an aid to persons with visual impairment.
5.6 Secondary national and local roads with pedestrian crossings shall be provided with light controlled pedestrian crossing signals with synchronized audible pedestrian traffic signals.

5.7 The audible signal used for crossings should be easily distinguishable from other sounds in the environment to prevent confusion to persons with visual impairment. A prolonged sound should be audible to warn persons with visual impairment that the lights are about to change.

5.8 The flashing green period required for the person with disability should be determined on the basis of a walking speed of 900 mm/sec. rather than 1200 mm/sec. which is what is normally used. The minimum period for the steady green (for pedestrians) should be the crossing distance times 900 mm/sec. (Refer to Traffic Engineering Center Guidelines for pedestrians with Disabilities).

**C. INSIDE BUILDINGS AND STRUCTURES**

**1. Accessible Entrances**

1.1 Entrances shall be accessible from arrival and departure points to the interior lobby.

1.2 One (1) entrance levels should be provided where elevators are accessible.

1.3 In case entrances are not on the same level of the site arrival grade, accessible ramps should be provided as access to the entrance level.
1.4 Entrances with vestibules shall be provided with a level area with at least a 1.80 m. depth and a 1.50 m. width. (See Fig. C.1.2)

1.5 In cases where frameless transparent glass doors and any other vertical transparent glass panels are provided, such glass panels should be provided with horizontal or graphical patterns with contrasting gray value color against adjacent and background colors, between 800 mm and 1.50 m. above the floor to prevent PWDs from bumping against it.

1.6 Accessible entrance/exit of a building shall be provided with large overhanging roof (canopy) to protect PWDs as well as non-PWDs from rain.
2. Doors

2.1 All doors shall have a minimum clear width of 900 mm.
2.2 Clear openings shall be measured from the face of a fully open door at 90 degrees and the door jamb

Fig. C.2.1 Plan of SLIDING DOOR

Fig. C.2.2 Plan of SWING DOOR
2.3 Lever type locksets should be operable by a pressure or force not more than 1.0 kg; the door closer device pressure on an interior door shall not exceed 4.0 kg.

2.4 A minimum clear level space of 1500 mm x 1500 mm shall be provided before and extending beyond a door;
EXCEPTION: where a door shall open onto but not into a corridor, the required clear, level space on the corridor side of the door may be a minimum of 1200 mm corridor width.

2.5 Protection should be provided from doors that swing into corridors.

Fig. C.2.3

2.6 Out-swinging doors should be provided at storage rooms, closets, toilets and accessible restroom stalls.

2.7 Latching or non-latching hardware should not require wrist action or fine finger manipulation.

2.8 Lever type locksets and other hardware should be located between 20 mm and 1.06 m above the floor; 900 mm is preferred.
2.9 Vertical pull handles, centered at 1.06 m above the floor, are preferred to horizontal pull bars for swing doors or doors with locking devices.

2.10 Doors along major circulation routes should be provided with kick plates made of durable materials at a height of 300 mm to 400 mm.

2.11 For doors with peepholes, provide a secondary peephole at a height of 1.1 m from the finish floor for wheelchair users.