



International  
**Paralympic**  
Committee

# **IPC Accessibility Guide**

## **Key Measurements Reference Table**

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**International Paralympic Committee**

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## Presentation

The following table refers to the key sections and measurement references from the Technical Specifications chapter of the IPC Accessibility Guide. This table should be referenced in conjunction with the chapter, as it does not provide the same level of detail and includes only the key measurements most often referenced.

### Pathways and circulation areas

Key Item	Measurement	Comments
Pathways	Width: <b>1,000mm</b> (minimum) <b>1,500mm</b> (standard) <b>1,800mm</b> (best practice) Clear headroom space: <b>2,100mm</b>	Pathway width measurements are applicable to ramps, queuing areas, aisles, etc.
Gradient	<b>1:20 (5%)</b> best practice recommended <b>1:14 (7.14%)</b> maximum grade allowed <b>1:50 (2%)</b> maximum cross slope	A landing is required after a ramp covering <b>500mm</b> of height difference
Rest stop benches	<b>50m</b> intervals	



## Ramps

Key Item	Measurement	Comments
Slope	<p><b>1:20 (5%)</b> max. grade best practice</p> <p><b>1:14 (7.14%)</b> max. grade for height up to 3000mm</p> <p><b>1:12 (8.33%)</b> max. grade for height up to 300mm</p> <p><b>1:50 (2%)</b> maximum cross slope</p>	<ul style="list-style-type: none"> <li>▪ 1:20 applies as max. grade for ramps serving primary entrances or busy facilities, long or crowded walkways or for covering more than 3000mm height difference</li> <li>▪ 1:14 (7.14%) max. grade is acceptable for secondary or ancillary facilities</li> <li>▪ Ramps should not exceed 60m in length</li> </ul>
Width	<b>1,000mm</b> (minimum)	Measured between handrails
Landings	<p>Landing every time ramp covers a vertical height difference of <b>500mm</b></p> <p>Width: same as ramp width</p> <p>Length: <b>1,500mm</b></p>	
Handrails	<p><b>850-950mm</b> above ramp surface</p> <p><b>35-45mm</b> grip surface</p> <p><b>45-60mm</b> from wall surface</p> <p><b>300mm</b> extension beyond start and end of ramp</p>	Handrails applicable for height difference of more than 300mm and must be on both sides
Kerb ramps	<p><b>2,700mm</b> max horizontal length</p> <p><b>1:8</b> max. grade for height up to 75mm</p> <p><b>1:10</b> max. grade for height up to 150mm</p> <p><b>1:12 (8.50%)</b> grade for height +150mm</p> <p><b>1,000mm</b> minimum width</p> <p><b>1:10</b> maximum slope of flared sides</p>	<ul style="list-style-type: none"> <li>▪ Slip resistant surfaces</li> <li>▪ Detectable warning surface (colour/texture contrasted)</li> </ul>



## Stairways

Key Item	Measurement	Comments
Treads and risers	<b>125-180mm</b> height of risers <b>280-350mm</b> depth of treads	
Nosings	<b>38mm</b> maximum	Non slip, high contrast
Detectable warnings	Depth: <b>600mm</b> Width: width of the stairs	
Handrails	See handrails section above	

## Furniture, Counters and Service Areas

Key Item	Measurement	Comments
Reception Desks / Service Counters	<b>850mm</b> height <b>750mm</b> knee clearance <b>500mm</b> depth <b>750mm</b> width (minimum)	Main service area must be accessible – avoid segregated cut-outs/service areas for wheelchair users
Waiting and Queuing Areas	<b>1,500mm</b> min width for each line <b>1:50 (2%)</b> maximum slope allowed	Rest benches needed where line is longer than 50m
Condiment Counters	<b>850mm</b> surface height <b>600mm</b> reach requirement (from front edge) <b>300mm (w) x 200mm (d)</b> min clear space for food preparation	



Key Item	Measurement	Comments
Restaurant / Lounges / Food Court Seating	<p><b>1,500mm</b> min. main pathway width</p> <p><b>1,000mm</b> minimum aisle width</p> <p><u>Bar seating</u>: must include lowered section <b>850mm</b> height, <b>750mm</b> knee clearance, <b>1,600mm</b> minimum width</p> <p><u>Bench seating</u>: should provide back support, with mx. 450mm seat height and 750mm backrest height plus minimum kick space of 1/3 seat depth</p>	Mix of chairs should be provided – 20% with arms

## Doors and Doorways

Key Item	Measurement	Comments
Door width	<p><b>850mm</b> minimum</p> <p><b>950mm</b> best practice</p> <p><b>1,000mm</b> required for specific sports' athletes preparation areas</p>	Measured when door is open 90 degrees
Door requirements	<p><b>150mm</b> min inside handle dimension</p> <p><b>900-1,100mm</b> handle height from floor</p> <p><b>500mm</b> clear space on pull side</p> <p><b>300mm</b> clear space on push side</p>	<ul style="list-style-type: none"> <li>▪ Handles operable by one hand</li> <li>▪ Sliding doors are preferable</li> <li>▪ Revolving doors are not considered accessible</li> </ul>

## Elevators

Key Item	Measurement	Comments
Doors	<p><b>850mm</b> minimum clear width</p> <p><b>950mm</b> minimum clear width for elevators serving public spaces and sport facilities</p>	
Car	<p><b>1,700mm x 1,500mm</b> min clear size</p> <p><b>2,100mm x 1,500mm</b> best practice</p>	For handrail information see above (ramps section)



Key Item	Measurement	Comments
	for high public use (sport, entertainment)	
Controls	<p><b>250mm</b> from front return panel on side wall</p> <p><b>850-1,200mm</b> button height range from floor</p> <p><b>20mm</b> button diameter</p>	<ul style="list-style-type: none"> <li>▪ Buttons shall have raised characters for letters and numbers and Braille (immediately to the left of buttons)</li> <li>▪ Synthesized voice floor callers for direction and destination</li> </ul>

### Emergency Provisions

Key Item	Measurement	Comments
Areas of Rescue Assistance	<b>850mm x 1,300mm</b> min space per anticipated user (no fewer than 2 spaces)	See Emergency Provisions section for further detail on provision and use of these spaces
Alarms	<p>Visual fire alarms maximum allowable strobe flash rate: <b>1-3 Hz</b></p> <p><b>1,200mm</b> maximum operating height of alarms pulls and safety equipment</p>	<ul style="list-style-type: none"> <li>▪ Visible in all public gathering areas, washrooms, and in front of elevators</li> <li>▪ Emergency call buttons recommended for washrooms with facilities for wheelchair users</li> </ul>
Evacuation Instructions	<b>1,300mm</b> maximum mounted height	<ul style="list-style-type: none"> <li>▪ Large print (min 14pt font)</li> <li>▪ High contrast (red on white)</li> </ul>



## Venue Seating

Key Item	Measurement	Comments
Accessible Seating	<p><b>0.50%</b> minimum requirement for any event</p> <p><b>0.75%</b> minimum requirement for Olympic Games</p> <p><b>1% - 1.2%</b> minimum requirement for Paralympic Games</p> <p><u>Space requirements:</u></p> <p><b>800mm x 1,300mm</b> wheelchair user</p> <p><b>500mm x 1,300mm</b> companion/enhanced amenity</p> <p><b>1,000mm</b> minimum circulation space behind</p>	<ul style="list-style-type: none"> <li>▪ Percentages of total gross seating</li> <li>▪ Companion seating to be provided at an equal ratio, next to (not behind) each space</li> <li>▪ Additional enhanced amenity seats should be provided at end of rows at a min. ratio of 1% of gross capacity</li> <li>▪ See venue seating section for complete requirements</li> </ul>
Sightlines	<p>Sightlines of accessible seating must provide the same sightline for a person seated in a wheelchair when a person in front stands up, as the person in front has when standing.</p> <p>For Paralympics, this rule applies for all accredited seating and for spectators' seating up to 1% of venue's gross capacity.</p> <p>Accessible seating in excess of this percentage may have same sightline as the person in front when also seated.</p>	<p>Railings and other obstacles should not impair the sightlines of people using accessible seating.</p>



## Washrooms

Key Item	Measurement	Comments
Numbers and Ratios	<b>1:15</b> (one toilet for every 15 persons who need one) minimum ratio for accessible toilets	Every bank of toilets must have one unisex accessible facility adjacent
Signage	<b>1,350mm</b> mounted from the floor on the wall (on the latch side of the door, not on the door itself)	Standardized symbols used with raised lettering 1mm in height
Circulation Spaces	<p><b>2,200mm x 1,800mm</b> clear space of a unisex accessible washroom</p> <p><b>1,500mm x 1,500mm</b> clear space of a gender-specific accessible toilet</p> <p><b>850mm</b> min. door width (950mm best practice)</p> <p><b>750mm</b> transfer space next to toilet lid, with <b>800mm</b> being best practice</p>	<ul style="list-style-type: none"> <li>▪ Unisex accessible washroom includes toilet pan, wash basin, grab rail, mirror, soap, paper towel, toilet paper dispensers</li> <li>▪ Light operating door closer (<b>20Nm</b>) and self-closing</li> </ul>
Fixtures	<p><b>450mm</b> toilet pan from side wall</p> <p><b>440-460mm</b> toilet seat height</p> <p><b>750mm</b> long L-shaped grab bars, mounted: <b>230mm</b> above toilet seat, <b>150mm</b> in front of toilet seat</p> <p><b>600mm</b> min. height of toilet paper</p>	<ul style="list-style-type: none"> <li>▪ Back support should exist where there is no lid or tank</li> <li>▪ Tank lid securely attached</li> <li>▪ Toilet flush controls electronic or within reach on transfer side (opposite the wall / grab bar)</li> </ul>
Sink Area	<p><b>900-1,100mm</b> height of accessories, <b>750mm</b> from the centre of the sink</p> <p>Mirror immediately above the basin at a height of <b>1,800mm</b></p> <p><b>150mm</b> maximum basin depth</p> <p><b>680mm</b> basin height clearance</p>	<ul style="list-style-type: none"> <li>▪ Accessories include: soap dispenser, paper towel, etc.</li> <li>▪ Hands-free tap is preferred</li> <li>▪ AC outlet should be located close to toilet for adaptive devices</li> </ul>





## Showers, Baths and Changing Rooms

Key Item	Measurement	Comments
Accessible Shower Features	<p><u>Water control:</u> mounted <b>750mm</b> from the floor and <b>750mm</b> from end wall</p> <p><u>Folding seat:</u> <b>480mm</b> deep, <b>850mm</b> long, mounted <b>440-460mm</b> from floor, 135kg load capacity</p> <p><u>Hand held shower:</u> <b>1,500mm</b> hose</p> <p><u>Grab bars:</u> <b>750mm</b> (along folding seat wall) x <b>900mm</b> (along shower wall) set horizontally, <b>850mm</b> above the floor</p>	<ul style="list-style-type: none"> <li>▪ Lever operated faucet with <b>13N</b> operating force</li> <li>▪ Recessed soap holders or shelves within easy reach</li> <li>▪ Scald guard or thermo controlled valve</li> <li>▪ See diagram in Shower section of Chapter 2</li> </ul>

## Transportation

Key Item	Measurement	Comments
Transport load zone	Aisle: <b>2,400mm (w) x 7000mm (l)</b> <b>3,300mm</b> height allowance	Must be equipped with at least one kerb ramp
Parking Area Requirements	<b>2%</b> (best practice is <b>3%</b> ) of spaces should be accessible <b>2,300mm</b> minimum height clearance ( <b>2,500mm</b> best practice) for underground parking	Spaces should be located in the most convenient point based on entries and exits, lifts and ramps, accessible toilets and pay stations
Accessible parking spaces	<u>Width:</u> <b>3,200mm</b> (minimum) <b>3,600mm</b> (best practice) <u>Signage:</u> <b>750mm<sup>2</sup></b> size of international symbol on ground, <b>1,500mm</b> height of vertical international symbol sign	See Pathways, Circulation Areas, Ramps and doorways for information regarding access provisions



## Accommodation Sites

Key Item	Measurement	Comments
Room	<p>Circulation and change of direction: one space <b>1,500 mm x 1,500 mm</b></p> <p>Transfer Spaces: <b>min. 750mm</b>, best 800mm</p> <p>Paths and passageways: at least <b>1000mm</b></p> <p>Controls/switches: <b>850 mm-1,200mm</b></p> <p>Electrical outlets and data connections: at <b>450mm</b></p> <p>Manoeuvring space in front of closets: <b>1,500mm</b></p>	<ul style="list-style-type: none"> <li>▪ Bed top height: 450–500 mm</li> <li>▪ Bedside tables: min. toe space of 225mm high x 300mm deep</li> <li>▪ Operators of window/curtains: extend to at least 1,200mm</li> <li>▪ Mounted hanger rod: 1,200mm</li> </ul>
Wheelchair Friendly Room	<p>Door widths minimum <b>800mm</b></p> <p>One spot within the room with a diameter of <b>1,200mm x 1,200mm</b></p> <p>Transfer space of min. <b>750mm 800mm</b> in at least one of bed sides Height of controls lower than <b>1,400mm</b> or provide “handling stick”</p> <p>Toilet seat of min. <b>450mm</b> height with transfer space in one side</p>	<ul style="list-style-type: none"> <li>▪ Long stick, to allow mounting and demounting of hangers in cupboards</li> <li>▪ Portable bath amenities</li> <li>▪ Shower chair with back and/or handrails in the bath tube</li> </ul>