

# Checklist for Elements of Universal Accessibility in Public Projects

The document contains a simplified checklist that focuses on an inclusive approach to urban planning, design, and implementation of all public infrastructure projects. It facilitates ease of use and ensures compliance with accessibility guidelines and standards set forth by MoHUA. The checklist has been prepared by the Building Accessible Safe Inclusive Indian Cities (BASiIC) programme at NIUA and co-developed by IIT, Roorkee as part of the strategic partnership to refine the guidelines and standards pertaining to universal access and Inclusive design in India.

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Below are the To-Do's to ensure Inclusion for each stage of the project cycle:

Project Cycle Checklist	
Project Stage	To-Do's
Feasibility Study	Feasibility study should be anchored to the needs of persons with disabilities, other marginalized communities, and users representative of the demographics in the area
Concept Development	Need Assessment and its translation into requirement through; Periodic collection of disaggregated data on the quality and numbers of the marginalized groups living in the concentrated area Public projects to conduct consultations with all types of beneficiaries to understand their needs and expectations Ensure "availability, accessibility, affordability, acceptability" for all in project brief
Design Stage	Design of the Built environment elements - reviewed and ratified by an Accessibility Auditor (registered with Accessible India Campaign) Design team consists of the Accessibility Expert
	Stakeholder Consultation to be done with (citizenry, developers, government) to review the proposals
Tendering stage	Tendering to include construction of accessibility elements (as detailed subsequent table) with detailed specifications, dimensions and material qualities.
	Operational and maintenance cost of both hardware and software as well as goods and services should be considered in the bidding process itself
	Websites, mobile applications and digital infrastructure to be compliant to the W3CGA Standards
Procurement	Procurement to be in-accordance to the accessibility and quality compliance Procurement of material/elements needs to detail out accessibility specifications as part of tendering process
Implementation stage	Compliance check of incorporation of proper standards for accessibility and safety into the procurement and the contract document
	Enhancement of capacities of officials on tenets of accessibility, safety and inclusivity (BASiIC Training & Capacity Building activities)
	Training & capacity building of contractors on universal design & proper construction of accessible elements by an empanelled accessibility trainer
	Quality certification check empanelled accessibility auditor for accessibility features during and after the implementation stage
Maintenance & Operations	Maintenance of accessible infrastructure to be ensured by periodic (maximum five year interval) accessibility audits including Quality Check
	Periodic city-wide audit to keep a check on usability of inter connected components of urban system. Repors to be available in public domain

## Universal Design Parameters

Elements	Parameters
Parking	Bay Size 3600 mm (including 1200 for wheelchair assistive devices like rollators, etc. circulation) x 5000 mm
	Bay located within 30 M of accessible/ main entrances
	Designated parking space for Adapted scooters / tricycles
	Non Slippery Surface Material (no loose material like sand/gravel etc)
	Signages for accessible parking (signage for accessible car and adapted two wheeler parkings) - at visible locations - A 1000m x 1000mm signboard, provided at 2100-2500mm clear height
	Provision of footpath (1200 mm wide) behind car parking for Wheelchair movement
	Provision of Kerb ramps (1800mm wide) in footpath behind the parking at appropriate places (adjoining the alighting area)
	Tactile warning tiles with stop tiles near obstacles and kerb ramps in access footpath
	No landscapes (like tree branches and other elements) in the walkway to pose obstruction to persons with vision impairments
Alighting and boarding areas	Clear demarcation through visual signs (floor and standing) for drop off or alighting areas
	Provision of Kerb ramp (900 mm) in Passenger boarding area
	Provision of Parking asiles (1500mm wide and 5000 mm long) with required turning angle
	Provision of Tactile warning tile at 300 mm offset from the kerb stone
	Provision of Kerb stones in high contrast to the flooring material
Taxi Drop off area	Earmarking of Clear drop off zones with visibility at night as well, preferably with no honking signs
	Provision of Seating at a distance of 900 mm from the railing
	Provision for space for at least two wheelchairs (after required seating) in the Covered area
Bus Drop off areas	Double line of tactile warning tiles before the boarding area
	Provision of Seating at a distance of 900 mm from the railing
	Provision for space for atleast two wheelchairs (after required seating) in the Covered area
Kerb Ramps	Slope with gradient to be maximum 1:10
	Flared edges to be maximum 1:10
	Strip of warning tactile blocks at the beginning and end of ramp
Sideways	Use of non-slippery materials for floor surface
	Continuous along the length of the road with kerb cuts at appropriate places
	Height not more than 150 mm
	1500 -1800 mm clear width (at least)
	Unobstructed tactile guiding blocks for persons with visual impairment. Warning tiles around obstructions including existing tree pit/ manhole/poles.
	No overhead obstructions or projections Clear headroom of 2100mm (min)
Walkways/ pathways	Smooth, hard and levelled floor surface
	1500-1800 mm width (for two way movement)
	Gradient to not exceed 1:20
	Provision of appropriate resting place at 30m intervals for walks more than 60m
	Manhole covers to be surrounded by tactile warning tiles
	Provision of adequate lighting high colour contrast between level surfaces
	Design of Tactile Guiding system at intersection as per Harmonised Guidelines

Universal Design Parameters	
Street Furniture	Provisions of Seats with height 450-500mm and a backrest & handrest at 700mm height
	Provision of appropriate/sheltered resting place at 30m intervals for walks more than 60m
	Seating areas to be well illuminated and with clear hard paved surface in contrasting colour
	Demarcated wheelchair, parking spaces to be provided in seating areas.
	Provision of Litter bins, lighting poles etc - away from the tactile pathway
Vending Machines	Accessible from a distance of 500 mm
	Vending display height 900-1200 mm
	Provision of audio signals in vending machines and acoustically sound environments
Information Display Board	Height to vary from 900-1800 mm
	Warning signage for slopes, obstructions, water body to be provided at visible locations.
Bollards	General Spacing of bollards 750mm wide and one space 900 mm wide (for wheelchair access).
	Height 1000 mm
	Provision of tactile tiles in the centre of the clear space between bollards
	Provision of distinctly visible bollards through a contrasting colour material against the floor surface with light reflective indicators / surface
	Use of Vandalism proof and high durability materials
Safety Rail	Provision of Safety rails (800 mm high) at required places including landscape features like water elements etc.
Obstructions/ Protruding Objects	Provision of contrasting colour of Protruding objects /obstructions
Green Areas	Provision of Smooth, hard and levelled surface walkway for comfortable movement of wheelchair/ strollers/crutches etc
	Provision of Tactile Tiles in the center of the hard paved walkway
	Provision of regular cleaning of leaf litter from the hard paved walkway
	Provision of Inclusive components like Play Equipments for children with disabilities, Senior Citizen corner etc.
	No landscapes (like tree branches and other elements) in the walkway to pose obstruction to persons with vision impairments
	Provisions of plantation scheme with minimum littering
Gratings for storm water drains	Longer dimension perpendicular to the direction of travel
	Provision of either perforated or grooves in the grating with space less than 12 mm for safe mobility or crossover by people using sticks/canes/ wheelchairs/strollers
	Edges of gratings to be well concealed in the floor masonry / civil work
Entrance to public spaces	Provision of well-defined and covered (for weather protection) for entrances of public spaces along with designated signage
	Provision of step free entrance (Preferably) Provision of contrasting colour schemes and nosing for Steps or plinth edges
	Provision of tactile Guiding blocks in desired/recommended manner
	Provision of pedestrian gate with clear width 900mm (at least)
	Provision of Ramps with both side handrails of gradient 1:12 (for plinth level, wherever it's a stepped entrance)
Public Toilets	Visibility of Public toilets from a distance with multiple signs showing male / female and accessibility
	Provision of access Ramps (1:12 or 1:14 slope gradient) with both side handrails (with non-slip surface)
	Provision of multiple unit choices of toilets (including Indian squat and European WC type fixtures)
	Atleast one unisex toilet of size 2000 x 2200 mm with min. 900 mm clear door width
	Provision of Grab Rails at both sides of the cubicle (with 680mm clear width)
	Provision of Unisex/Family toilet (with diaper changing area and adequate accessories)

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	Provision of at least one step free Urinal in male toilets and at least one urinal at low height with grab rails
	Provision of Washbasin at accessible height
	Provision of easy door closing mechanisms (simple lever type attachment)
	Provision of Panic alarm buttons and an alarm signal outside with flash sign light for emergency situations
	Provision of Inclusive Signs for Public Toilet (signs for Female, Male, Transgender, Family and Babies)
Drinking Water	Provision of drinking facility basin at a height of 800-900mm and 480mm wide. Provision of tap above 100mm from the basin
	Provision of warning tactile tile below the basin
	Provision of lever types taps
Ticket Counter	Provision of counter with height to be 750 mm and rounded counter edges
	Provision of counter to extend 480 on the outside with clear knee space below it
Pedestrian Crossings	Provision of kerb ramps or raised islands at crossings
	Tactile warning tiles at least of two rows to be marked at the beginning and end of traffic island
	Provision of pelican signals for pedestrians especially those with blindness (Recommended)
	Provision of pedestrian symbols along with disability symbol painted before the zebra crossing lines

Applicability Matrix			
Design Element	Public Open Spaces	Sustainable Mobility	Low Income Settlements
Parking	Yes	Yes	Yes
Alighting and boarding areas	Yes	Yes	
Taxi Drop off area	Yes	Yes	
Bus Drop off areas	Yes	Yes	
Kerb Ramps	Yes	Yes	Yes
Sideways		Yes	Yes
Walkways/ pathways	Yes	Yes	Yes
Street Furniture	Yes	Yes	
Vending Machines	Yes	Yes	
Information Display Board	Yes	Yes	
Bollards	Yes	Yes	Yes
Safety Rail	Yes	Yes	
Obstructions/ Protruding Objects		Yes	Yes
Green Areas	Yes		Yes
Gratings	Yes	Yes	Yes
Entrance to public spaces	Yes	Yes	Yes
Public Toilets	Yes	Yes	Yes
Drinking Water	Yes	Yes	
Ticket Counter	Yes	Yes	
Pedestrian Crossings		Yes	