



UNIVERSAL DESIGN MARK

ASSESSMENT CRITERIA FOR PARKS & PUBLIC SPACES

CERTIFIED

GOLD

GOLD ^{PLUS}

PLATINUM

DEVELOPMENT NAME : _____

ADDRESS : _____

DEVELOPER : _____

LANDSCAPE ARCHITECT/
ARCHITECT : _____

ASSESSMENT DATE : _____

ASSESSORS : _____

BCA UNIVERSAL DESIGN (UD) MARK CERTIFICATION SCHEME

The certification ratings range from basic requirements through to best practice in UD. The certification rating of a development is determined by the number of points scored during the assessment process.



CERTIFIED

- Applied basic UD principles in design
- Incorporated essential UD features that are over and above Accessibility Code compliance to create a more inclusive and user-friendly environment
- Score 50 < 65 points



GOLD

- Demonstrated user-centric design approach
- Incorporated comprehensive set of UD features that optimises access and caters to the needs of various user groups
- Score 65 < 80 points



GOLD^{PLUS}

- Displayed holistic approach in implementing UD principles in various stages of the development
- Well-conceived design features that are practical, aesthetically pleasing and appropriate for the context and function of the development
- Score 80 points and above



PLATINUM

- Integrated design process with strong focus on UD from conception to completion involving key stakeholders collaboration
- Design innovation through creative planning strategy, unique features, and/ or use of new technologies to create a high quality and usable environment for all building users
- Excel in all parts of the criteria checklist and score 85 points and above

To achieve UD Mark for Parks and Public Spaces



Pre-requisite

All relevant accessibility requirements in the prevailing Accessibility Code are to be complied with



Part 1: Process (11 pts)

- Project development
- User consultation

Part 2: User-friendliness (54 pts)

- User-friendly provisions in parks and public spaces
- Other user-friendly provisions
- Way-finding

Part 3: Design Integration (18 pts + 8 bonus pts)

- Concepts that create conducive environments
- Innovative UD strategies/features
- Integration of equitable use facilities
- Aesthetic integration

Part 4: Accessibility & Connectivity (37 pts)

- Inter-connectivity
- Vehicular access & Facilities
- Pedestrian access & Circulation

Part 5: Safety (14 pts)

- Safety in movement & use

Part 6: Operations & Maintenance (12 pts)

- User-centric policy
- Operation & maintenance of facilities
- Communication
- Training
- Public Awareness



Assessment criteria for Parks and Public Spaces is jointly developed by Building and Construction Authority and National Parks Board

UD Mark Criteria		Points	
		Available	Awarded
Part 1: Process Encourage the adoption of UD during project planning and development.			
1.1 Project development		<i>(Up to 4 points)</i>	
a.	Incorporate requirements for UD provisions in design brief	2	
b.	Project team comprises a BCA certified UD Assessor	2	
1.2 User consultation		<i>(Up to 7 points)</i>	
a.	Establish user needs through consultation sessions with (i) users (ii) user experts	2 2	
b.	Use of mock-ups to solicit user feedback on usability <i>Note: Mock-ups to be project-specific with a design solution/outcome derived from the study</i>	3	
Sub-total(Part 1)		Up to 11points	
Part 2: User-friendliness Demonstrate user-centric approach in planning, design, provisions and attention to details.			
2.1 User-friendly provisions in parks and public spaces		<i>(Up to 26 points)</i>	
a	Resting area <i>(pls check applicable)</i> (i) <input type="checkbox"/> adequate seating located along circulation route/s, trails and/or activity areas (ii) <input type="checkbox"/> seats fitted with grab bars/arm rests/back rests (iii) <input type="checkbox"/> seats of varying heights to cater to users of different statures (iv) <input type="checkbox"/> seats for comfort and durability (e.g. material with low heat absorption, robustness against vandalism) (v) <input type="checkbox"/> adjacent space/s for wheelchair and/or baby carriage (vi) <input type="checkbox"/> others (pls specify): _____	0.5 point (each) (max 3 points)	
b	Viewing areas <i>(pls check applicable)</i>	1 point (each) (max 2 points)	

UD Mark Criteria		Points	
		Available	Awarded
	(i) <input type="checkbox"/> provision of seating with unobstructed view to points of interest ; and (ii) <input type="checkbox"/> look out points and decks with clear ground space of 1800mm by 1800mm for wheelchair and/or baby carriage (clear ground space should not overlap circulation route)		
c	Shade provision at seating and resting areas (i) 50% of total seating and resting areas; or (ii) All seating and resting areas	1 point 2 points	
d	Shade provision along pathways (pls demonstrate via a planting plan submission) (i) 50% of main pedestrian circulation; or (ii) 50% of all pedestrian circulation	1 point 2 points	
e	Social and recreational facilities with appropriate means of access and equipment for family, elderly and wheelchair users (pls check applicable) (i) Children's play area (a) <input type="checkbox"/> safe playing environment (e.g. sited away/barricaded from traffic or potential hazards, shock-proofed floor surface, play equipment of non-toxic materials and with rounded edges) (b) <input type="checkbox"/> certification by Certified Playground Safety Inspector (CPSI) (c) <input type="checkbox"/> play equipment suitable for use by children with disabilities (d) <input type="checkbox"/> play equipment for children of various age group (e.g. 3 to 5 years old, 6 to 12 years old) (e) <input type="checkbox"/> water play areas with appropriate washroom facilities (f) <input type="checkbox"/> ample seating provided nearby for visual supervision by caregivers (g) <input type="checkbox"/> shade provision for the play area and seating area (h) <input type="checkbox"/> others (pls specify): _____	0.5 point (each) (max 4 points)	

UD Mark Criteria		Points	
		Available	Awarded
b	Designated nursing room (partitioned nursing area/s with seat/s, wash basin, diaper changing station/counters, hot water dispenser) at an appropriate area for nursing mothers to feed and change their babies in privacy and comfort	2 points	
c	Appropriate illumination along circulation/walking routes and activity and play areas to extend opportunities for physical activity into the evening	1 points	
d	Other services/facilities (pls check applicable) (i) <input type="checkbox"/> baby carriage, kiddy-cabs, wheelchair and/or motorised scooter rental service (ii) <input type="checkbox"/> Shuttle bus service (iii) <input type="checkbox"/> bicycle rental, service stations (iv) <input type="checkbox"/> lockers for heavy belongings and baby carriage (v) <input type="checkbox"/> accessible drinking fountain/s and/or vending machine/s (vi) <input type="checkbox"/> first aid and rescue equipment (e.g. automated external defibrillator (AED), first aid kit, life buoys, life jackets) (vii) <input type="checkbox"/> others (pls specify): _____	0.5 point (each) (max 4 points)	
2.3	Way-finding	<i>(Up to 14 points)</i>	
a	Physical design (pls check applicable) (i) <input type="checkbox"/> use of visual reference points and distinguishable markers (e.g. gateways, sculptures, fountains, planting) to aid users in orientation (ii) <input type="checkbox"/> use of surface patterns/textures to provide visual cues (iii) <input type="checkbox"/> use of characteristic of plants as sensory cue (iv) <input type="checkbox"/> Use of landforms characteristic to influence users' experience (e.g. hilly, flat land, etc) (v) <input type="checkbox"/> other (pls specify): _____	1 point (each) (max 5 points)	
b	Signage (i) clarity of signage system a. easy-to-read characters appropriately sized in relation to intended viewing distance b. easy-to-understand pictographs c. good colour contrast d. good illumination on signage e. appropriate mounting height for clear visibility	3 points <i>(3 points to be awarded by BCA assessors only after site verification)</i>	

UD Mark Criteria		Points	
		Available	Awarded
	(ii) Information and direction a. <input type="checkbox"/> Accessible route/s leading to/from the development (e.g. transport node, public street, cycling network, underpass, etc) b. <input type="checkbox"/> tactile directory map with Braille c. <input type="checkbox"/> directory maps with circulation/walking routes information (e.g. distance, steps, steep gradient, width, surface, boardwalk and other topographic features) located prominently at appropriate location d. <input type="checkbox"/> directional sign with indication of distance e. <input type="checkbox"/> Braille and/or tactile signage beyond prevailing code requirement f. <input type="checkbox"/> other (pls specify): _____	1 point (each) (max 6 points)	
c	Online information (i) <input type="checkbox"/> Provision for online information (e.g. landscape features in different weathers, accessible options for different demographic groups, etc) (ii) <input type="checkbox"/> Provision for internet/online application system (e.g. mobile application, GPS data, educational facts, QR code, etc) (iii) <input type="checkbox"/> other (pls specify): _____	1 point (each) (max 3 points)	
	Sub-total(Part 2)	Up to 54 points <i>(plus 3 points after site verification)</i>	

UD Mark Criteria	Points	
	Available	Awarded
<p>Part 3: Design Integration Demonstrate user-centric approach in the planning and design of spaces as well as holistic and aesthetic incorporation of UD principles/features.</p>		
<p>3.1 Concepts and spatial design that create conducive environments for intended use e.g. quality outdoor activity/ therapeutic spaces through landscape planning, provisions of spaces that promote social integration, spaces designed with flexibility for different use, alignment of UD features with intended experience such as UD friendly boardwalks for riverine experience; access mat for wheelchair to the beach for coastal experience etc.</p> <p>Pls specify: _____</p>	(max 8 points)	
<p>3.2 Innovative UD strategies/features e.g. innovative landscape design that provides a variety of experiential and spatial experiences including recreational opportunities, habitat/biodiversity appreciation, accessible viewing points. Designed for anti-vandalism and natural surveillance.</p> <p>Pls specify: _____</p>	(max 10 points)	
<p>3.3 Integration of equitable use facilities A holistic approach in the planning and design of UD features to achieve the UD objectives</p> <p>e.g. activity spaces and facilities that accommodate and/or challenge all users regardless of their abilities, same or equivalent means of access to facilities, information and services for all users, considerate placement of facilities, information and services with respect to safety, usability and convenience.</p> <p>Pls specify: _____</p>	(3 points to be awarded by BCA assessors only <u>after site verification</u>)	

UD Mark Criteria	Points	
	Available	Awarded
<p>3.4 Aesthetic integration</p> <p>Aesthetic integration of UD facilities, features, plantings and fittings that is complementary to overall landscape (softscape/hardscape) design and surrounding built environment</p> <p>Pls specify: _____</p>	<p><i>(5 points to be awarded by BCA assessors only <u>after</u> site verification)</i></p>	
Sub-total (Part 3)	Up to 18 points <i>(plus 8 bonus points)</i>	
<p>Part 4: Accessibility & Connectivity</p> <p>Provide seamless connectivity to its surrounding built environment and enhances overall accessibility network to streets and sidewalks.</p>		
4.1 Inter-connectivity	<i>(Up to 9 points)</i>	
<p>a. Accessible route/s leading to nearby (pls check applicable)</p> <p>(i) <input type="checkbox"/> buildings/facilities within the development</p> <p>(ii) <input type="checkbox"/> adjacent development/s</p> <p>(iii) <input type="checkbox"/> Transport nodes (e.g. bus interchange, bus shelter, MRT station, LRT station, taxi stand etc)</p> <p>(iv) <input type="checkbox"/> traffic junction</p> <p>(v) <input type="checkbox"/> public street/sidewalk</p> <p>(vi) <input type="checkbox"/> overhead bridge</p> <p>(vii) <input type="checkbox"/> underpass</p> <p>(viii) <input type="checkbox"/> park connector</p> <p>(ix) <input type="checkbox"/> others (pls specify): _____</p>	<p>1 point (each) (max 9 points)</p>	
4.2 Vehicular Access & Facilities	<i>(Up to 8 points)</i>	
<p>a Entrance approach</p> <p>Provision of sheltered transport drop-off areas</p>	2 points	
<p>b Parking facilities</p> <p>(i) <input type="checkbox"/> provision of accessible parking lots beyond</p>	<p>1 point (each) (max 6 points)</p>	

UD Mark Criteria		Points	
		Available	Awarded
	<p>prevailing Accessibility Code requirements and located conspicuously near entrance/s</p> <p>(ii) <input type="checkbox"/> provision of family parking lots beyond prevailing Accessibility Code requirements and located conspicuously near entrance/s</p> <p>(iii) <input type="checkbox"/> Designated pedestrian walkways and crossings in car park</p> <p>(iv) <input type="checkbox"/> provision of bicycle parking lots</p> <p>(v) <input type="checkbox"/> Provision of specific signage leading to nearby parking facilities</p> <p>(vi) <input type="checkbox"/> Other (pls specify): _____</p>		
4.3	Pedestrian Access & Circulation	<i>(Up to 20 points)</i>	
a	<p>Accessible pedestrian entrance into the development</p> <p>(i) more than 50% of the entrances; or</p> <p>(ii) all entrances are accessible</p>	<p>1 point</p> <p>2 points</p>	
b	<p>Accessible pedestrian circulation routes of more than 1800m width</p> <p>(i) 1 circulation route with gradient no steeper than 1:25 leading to all accessible spaces and facilities; or</p> <p>(ii) more than 50% of circulation routes; or</p> <p>(iii) all circulation routes</p>	<p>1 point</p> <p>2 points</p> <p>3 points</p>	
c	<p>Safety paths/tracks for different users with clear demarcation and information (e.g. pedestrian/joggers, cyclists, people in roller blades and/or on skate board)</p>	2 points	
d	<p>Wider landing provisions at ramps</p> <p style="text-align: center;"><i>Straight-on: 2000mm by 2000mm</i> <i>90 deg turn: 2000mm by 2000mm</i> <i>180 deg turn: 2500mm by 2500mm</i></p> <p>(i) at main circulation route leading to all accessible facilities and features; or</p> <p>(ii) at all circulation routes</p>	<p>1 point</p> <p>2 points</p>	
e	<p>Staircase/s with UD features (pls check applicable)</p> <p>(i) <input type="checkbox"/> staircase/s that are part of a building to have minimum tread width of 300mm and maximum riser height of 150mm</p> <p>(ii) <input type="checkbox"/> outdoor staircase/s that corresponds with the table</p>		

UD Mark Criteria	Points	
	Available	Awarded

	<p>below:</p> <table border="1" style="margin-left: 20px; border-collapse: collapse; width: 60%;"> <thead> <tr> <th style="padding: 2px 5px;">Riser (mm)</th> <th style="padding: 2px 5px;">Thread (mm)</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">120</td><td style="text-align: center;">410</td></tr> <tr><td style="text-align: center;">125</td><td style="text-align: center;">400</td></tr> <tr><td style="text-align: center;">130</td><td style="text-align: center;">390</td></tr> <tr><td style="text-align: center;">135</td><td style="text-align: center;">380</td></tr> <tr><td style="text-align: center;">140</td><td style="text-align: center;">370</td></tr> <tr><td style="text-align: center;">145</td><td style="text-align: center;">360</td></tr> <tr><td style="text-align: center;">150</td><td style="text-align: center;">350</td></tr> </tbody> </table> <p>(iii) <input type="checkbox"/> handrails on both sides of the staircase/s and continuous at intermediate landing/s</p> <p>(iv) <input type="checkbox"/> secondary handrails for children</p> <p>(v) <input type="checkbox"/> braille/tactile indicators on handrails</p> <p>(vi) <input type="checkbox"/> intermediate handrails for staircases more than 2400mm wide</p> <p>(vii) <input type="checkbox"/> minimum length of landing at 1500mm</p> <p>(viii) <input type="checkbox"/> total risers between landings not exceeding 1500mm</p> <p>(ix) <input type="checkbox"/> wider kerb alongside staircase to facilitate pushing of bicycle</p> <p>(x) <input type="checkbox"/> non-slip nosing with luminescence</p> <p>(xi) <input type="checkbox"/> others (pls specify): _____</p>	Riser (mm)	Thread (mm)	120	410	125	400	130	390	135	380	140	370	145	360	150	350	1 point (each) (max 11 points)	
Riser (mm)	Thread (mm)																		
120	410																		
125	400																		
130	390																		
135	380																		
140	370																		
145	360																		
150	350																		
Sub-total (Part 4)		<i>Up to 37 points</i>																	
Part 5: Safety																			
5.1 Safety in movement & use		<i>(Up to 14 points)</i>																	
a.	<p>Appropriate use of surface finishes to provide warning on change in level (pls check applicable)</p> <p>(i) <input type="checkbox"/> contrasting colours</p> <p>(ii) <input type="checkbox"/> detectable warning surfaces</p> <p>(iii) <input type="checkbox"/> others (pls specify): _____</p>	1 point (each) (max 3 points)																	
b.	<p>Appropriate safety considerations along circulation route/s</p> <p>(i) <input type="checkbox"/> Walking surfaces are stable, firm, level, slip-resistant and free from water-ponding with maximum cross-fall gradient of 1:50</p> <p>(ii) <input type="checkbox"/> No obstacles, dangerous projections, protrusions overhead hazards and low hanging branches along pedestrian circulation</p> <p>(iii) <input type="checkbox"/> Appropriate illumination level with direct and reflected glare minimized</p>	1 point (each) (max 11 points)																	

UD Mark Criteria		Points	
		Available	Awarded
(iv)	<input type="checkbox"/> Softscape/vegetation not obstructing functional provision such as handrails, signage, illumination and etc.		
(v)	<input type="checkbox"/> Appropriate placement of street furniture/fixtures without obstructing pedestrian circulation		
(vi)	<input type="checkbox"/> Up stand edge protection of at least 75mm in height and 75mm in width where there is a direct drop of 200mm or more		
(vii)	<input type="checkbox"/> Gratings placed outside of circulation route and perpendicular to direction of travel		
(viii)	<input type="checkbox"/> Tree grilles levelled with adjacent ground surface		
(ix)	<input type="checkbox"/> Appropriate safety measures provided at areas such as water bodies, slopes, steep drops or prone to thunderstorm		
(x)	<input type="checkbox"/> Appropriate strategies (e.g. visibility, clear sightlines) to enable the chance of informal and formal surveillance so as to enhance safety and security.		
(xi)	<input type="checkbox"/> others (pls specify): _____		
Sub-total (Part 5)		Up to 14 points	
Part 6: Operations & Maintenance			
6.1 User-centric policy		<i>(Up to 2 points)</i>	
a.	Establish corporate policy on creating a user-friendly built environment	2	
6.2 Operation & Maintenance of Facilities		<i>(Up to 6 points)</i>	
a.	Design consideration made to ease maintenance of (pls check applicable) (i) <input type="checkbox"/> facilities, features and fittings (ii) <input type="checkbox"/> landscaping (softscape/hardscape) (iii) <input type="checkbox"/> others (pls specify): _____	1 point (each) (max 3 points)	
b.	Maintenance regime (pls check applicable) (i) <input type="checkbox"/> establish procedures for regular inspection, testing and maintenance (ii) <input type="checkbox"/> conduct regular audits to ensure good working condition of facilities, features and fittings (iii) <input type="checkbox"/> others (pls specify): _____	1 point (each) (max 3 points)	
6.3 Communication		<i>(Up to 2 points)</i>	
a.	Provide clear communication to employees on corporate philosophy and handling public user feedback	1	
b.	Provide feedback mechanism for users (eg. online feedback, feedback form at visitor centre,	1	

UD Mark Criteria		Points	
		Available	Awarded
	hotline number and etc.)		
6.4	Training	<i>(Up to 1 point)</i>	
a.	Strong commitment on training and equipping employees with UD knowledge	1	
6.5	Public Awareness	<i>(Up to 1 point)</i>	
a.	Raise greater public awareness towards user-friendly built environment (i) <input type="checkbox"/> educational signage on user-friendly initiatives/messages (ii) <input type="checkbox"/> Audio information of educational signage/messages (iii) <input type="checkbox"/> dedicated exhibition/educational spaces (iv) <input type="checkbox"/> prominent display of Universal Design (UD) plaque (v) <input type="checkbox"/> others (pls specify): _____	0.5 point (each) (max 1 point)	
Sub-total (Part 6)		Up to 12 points	
GRAND TOTAL			