







People with disabilities shall be called "people of determination"

Disability is in fact the inability to make progress and achievements, the achievements that people of determination have made in various fields over the past years are proof that determination and strength can do the impossible and encourage people to counter challenges and difficult circumstances while firmly achieve their goals.

> H.H. Sheikh Mohammad Bin Rashid Al Maktoum

> > 0

Introduction

About theguide

This illustrated guide has dual purposes, firstly to be used as audit hand book integrally with the classified universal design checklist in order to ensure the compliance with Dubai Universal Design Code requirements. Secondly, to be used as an inclusive design guide which helps in demonstrating the design characteristics of accessible built environment that enables everyone to approach, enter, use, and egress from the buildings safely and independently. Taking into consideration broad types of human abilities and circumstances including persons with physical, visual, hearing, and intellectual impairments, elderly, childhood, gender, mobility device users, and tourist equitably and dignifiedly.

Dubai Universal Design Audit Guide promotes better practice in early stage of built environments design and its commissioning, operation and management at a later stage, as well as retrofitting the existing built environments, and putting all necessary relevant information in a direct and

user-friendly format.

Designers and architects can refer to any of accessible design standards, codes, practice guides, and specifications documents of buildings components, equipment and services, but should exceed the minimum requirements of Dubai Universal Design code illustrated in this Guide.

Dubai Universal Design Audit Guide does not prevent by any means the use of technology and products as alternative accessible solutions if they at least provide equivalent accessibility of the prescribed requirements.

All dimensions and measurements in all figures are in metric units, mainly in mm and meters, in a range of flexibility that allows the designers to change according to the primary use of the building, like those especially designed for serving children.

In addition to the above, all scope requirements of Dubai Universal Design code should be followed.





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Entrance







E1 Gradients of entrances ≤5%





E2 When several paths, both accessible and inaccessible marked with directional sign

42° Entrance



E3 If accessible door not the main door, it is marked with directional sign

Entrance °43





- E3 If accessible door not the main door, it is marked with directional sign
- E4 Identification number and exact address for each entrance
- E9 Doormats levelled with ±2mm

44° Entrance





- E3 If accessible door not the main door, it is marked with directional sign
- E4 Identification number and exact address for each entrance
- E9 Doormats levelled with ±2mm

Entrance °45







- E6 Dimensions of the doors ≥900mm width x 2100mm height
- E7 Automatic door

46° Entrance





E8 3 seconds or more to move from closed to fully open position - Remain fully open for a minimum 5 seconds - Force not more than 66N

Entrance ° 47





E10 Access controls barriers with at least one barrier with width ≥900mm if provided

48° Entrance





E11 Tactile map located at the main entrance near the door on the right side within 1000mm

Е

Entrance °49

E





E12 A clear Area provided at the entrance to prevent shoes from blocking the accessible path



E14 Seats provided at the entrance toilets ablution areas and at other locations where people are required to remove their shoes

E15 An accessible entrance is provided

50 [°] Entrance



E5 In public use buildings, reception desk near the entrance

EGT1 Guiding tactile pavement from building entrance to information desk or reception in administration buildings and where required



EGT2 Guiding tactile pavement width ≥400mm

EGT3 Guiding tactile strips width = 40mm at bottom and 30mm at top, and protroing 4mm

EGT4 Non glare or shiny or slippery

52[°] Entrance





ER1 Reception areas with seating places and interaction spaces

Entrance [°]53



ER2 Front desks with accessible interaction space

ER4 Under the desk a space of 680mm height and 480mm deep

54 [°]Entrance

ER



ER3 Low counter height between 750-790mm & high counter height between 950-1250mm

Entrance [°]55





ER5 When required, hearing enhancement systems using induction loop, infrared and radio frequency are providedER6 With international symbol if access for hearing loss

56 [°] Entrance



Path



PE Path - Accessible Path Of Travel – External



- PE1
- 1800mm width without obstacle, from the parking to the entrance, segregated from traffic circulation
- **PE2** Linear and continued





PE3 Intersections clearly visible with signs or lights

60 ° Path



PE4 Gradient ≤5%

PE5

Clear headroom ≥2200mm



Absence of uneven surfaces - irregularities ≤5 mm

Path § 61

PE14 Cross slope gradient ≤2%

Path - Accessible Path Of Travel – External





PE7 Absence of protruding objects:

1-Objects protruding less than 100mm from façade

2-Objects protruding more than 100mm, extends to the floor surface or above the floor level by maximum 300mm

62 [°] Path



PE7 Absence of protruding objects:

- 1-Objects protruding less than 100mm from façade
- 2-Objects protruding more than 100mm, extends to the floor surface or above the floor level by maximum 300mm

Path - Accessible Path Of Travel – External



PE8 Furniture comply detection cone rule

64 [°] Path

PE



PE9 Illumination level ≥10 lux

Path § 65





PE10 No drain grids on accessible crossings (outside the intersection)

66 [°] Path



PE11 Free of obstacles and located between the building's façade and the furniture zone

Path $^{\circ}67$





PE Accessible path of travel – external

68[°] Path



PE12 Parking entrance do not modify the slope or width of the accessible path

Path 69







Path

70

PE13 Curb height between 100mm and 150mm



Cross Slope Gradient ≤2%

ΡΕ



Pedestrian bridges with ramps or elevators if provided **PE15**

Path ° 71



Pbs1 Width ≥1500mm



Pbs2 Longitudinal gradient ≤5% and cross gradient ≤2%

Pbs3 Suitable for walking barefoot with low heat transmission

Pbs4

Public toilets near accessible path and the car parks

Pbs8 With accessible showers in beaches

72 [°] Path


- **Pbs5** Reaching the water edge
- Pbs6 Including accessible services like toilets, showers, changing rooms, furniture, emergency and other services
- Pbs7 Floating rope to help users to access into the water

Pbs8 With accessible showers in beaches



Pbs9 Shower controls height between 700-1200mm and activated with elbow

Pbs10 Shower area width ≥1800mm

Pbs11 Shower provided with armless bench rised 450mm for seat base and 900mm for the back, located at 200mm from the shower

74[°] Path





If there is a cycling paths it's between urban furniture and curb

Pedestrian crossings are preceded by tactile warnings

Path °75



Pbs14 Curb cut gradient at crossing ≤8%

76° Path



Pbs15 At least shaded zones are provided every 50m max

Path $^{\circ}77$







Floor surface of rubber or compacted sand

PLg2 Smooth and soft floor surface for children play area

PLg3 ≥50% of play activities are usable by children with disabilities PLg4

Low heat transmission materials of play activities

Materials treated to prevent electrostatic discharges and if not, should be marked with symbol with magnatic warning sign PLg5

78 Path



Path $^{\circ}79$

- **PF1** Slip resistance (PTV) comply: level and inclined with ≤5% dry areas indoor (PTV) Between 15 and 35
- **PF2** Inclined >5% dry areas indoor, (PTV) ≥35





PF3 Level and inclined with ≤ 5% wet areas and outdoor - (PTV) Between 35 and 45

PF4 Inclined > 5% wet areas and outdoor, (PTV) \ge 45

Path

80







Path 81



PF6 Ground pavement without loose elements

82 ° Path



PF7 Rugs and carpets are firmly fixed and do not increase the strength required to roll over a ceramic pavement by ≥25%

Path 83





PF8

Without rounded edges and excessive joints



Not producing glare

84 [°] Path



PF10 With reflectance contrast of at least 30 points LRV between accessible pavement (surrounding surface or 300mm pavement strip)



PF11 Lighting in floor (Flooring Light) not produces glare and excessive heat

86 [°] Path





PF14 Change of pavement level <15mm, with <25% gradient slope (chamfered)

88[°] Path



PF15 Longitudinal grate openings with perpendicular orientation to the pedestrians' direction of travel





PF16 For distance between tree basin edge and the façade < 1800 mm, tree grate with walkable surface

90[°] Path



PI1 Width ≥1000mm



In direction changes a maneuvering space of 1200mm

PI5 Clear headroom ≥2200mm

Path $^\circ 91$



92 ° Path



PI6 Absence of protruding objects:

1-Objects protruding less than 100mm from façade

2-Objects protruding more than 100mm, extends to the floor surface or above the floor level by maximum 300mm

Path °93

Level Changes







With sufficient strength and stiffness to withstand horizontally uniformly distributed force of 3 KN/m







LCG5

Width of horizontal and vertical openings ≤100mm

96 Level Changes



LCG6

1- Availability of continuous base on the entire open side length

2- Continuous base ≥100mm hight from the floor surface for ramps & stairs





LCWT1

Available in the beginning and end of every level change including ramps and stair landings, or any dangerous element



Installed along the entire width of the element

98 Level Changes



LCWT1

Available in the beginning and end of every level change including ramps and stair landings, or any dangerous element



Installed along the entire width of the element





LCWT3 The width ≥300mm

LCWT4 Located at 300mm away from the edge of the ramp or stair flight or any dangerous element

100° Level Changes

LCWT Level Changes - Warning Tactile Surface



LCWT5 Warning tactile truncated cones diameter = 30mm at bottom and 20mm at top, and protruding 4mm

LCWT6 Non glare on shiny or slippery

Level Changes 101





Level Changes





LCR5 Run width = 1000 mm between handrails

Level Changes °103





LCR6 No curved ramps

104 [°] Level Changes



Level Changes 105

- LCR7 Landings at the beginning and end of every run -surface 1500mm x 1500mm
- LCR8 Level landings or ≤2%
- LCR9 Corridors in landings width ≥1200 mm width





LCR10 No door located at ≤1500mm from start and or end of each ramps

Level Changes

106



LCS1 Availability of alternative elevator accompanied with internal staircase in more than one story building

Level Changes 107




LCS5 No curved stairs



LCS6 No open risers or discontinued treads





Steps with nosing $\leq 25 \text{ mm}$

30 mm from the step edge space along the stair flight width shall present a reflectance contrast of 30 LRV

 110° Level Changes



Steps with same height with a ±4mm tolerance LCS9



LCS10 Stair flights steps number between 3 and 12

Level Changes $^{\circ}$ 111





LCS11 Usable stair flight width ≥1100mm



3 Landing with same width of stair and a length ≥1200 mm



LCS12

Illumination at top and bottom of the flight \ge 200lux





LCS14 Empty space with height <2200mm under the stair is protected

114 [°] Level Changes





300 mm horizontal extension at its ends

LCH2 Presence of intermediate handrail for stairs to keep distance of at most 2100mm

Level Changes - Handrail for ramp and stairs





116

Mounted at height of 900mm

Additional handrail at a height between 650 - 750mm

Level Changes

LCH



1000mm

LCH5



Level Changes 117

00000

Level Changes - Handrail for ramp and stairs





118

Rounded section of 30 - 40 mm separated from the wall with a distance ≥40mm



LCH9

Handrails designed to allow continuity of gripping without interfering its mounting system

Handrails made of comfortable materials against heat and coldness

LCH8 Contrast of 30 LRV against its background

Level Changes

LCH





LCE1 Present in buildings with more than one floor



Accessible from ground floor in public areas







120

Dimensions shall comply: One door ≥1200 x 1500mm - Two opposing doors ≥1200 x 1500mm - Two doors in 90° ≥1500 x 1500mm



LCE4 Automatic doors with a width of 900 mm and colour contrast against walls





LCE5 Maneuvering space of 1500 x 1500mm in front the elevator access

122 [°] Level Changes







LCE8 Only one mirror inside the cabin on the wall opposite to the door over the handrail level

Inside the cabin, minimum two handrails at a height of 800 mm to 1000mm from the floor

124 [°] Level Changes

LCE9





LCE11	The ground floor button protruded \geq 3mm distinguished with a green color
LCE12	Call buttons distinguished with icons and color contrast against background
LCE13	Buttons provide two-channel feedback/ visual & acoustic OR visual & tactile
LCE14	Emergency phone number is indicated by graphic and tactile





LCE15 CCTV or intercom or alternative system

126 [°] Level Changes



LCE16 Light on the ceiling only with 100 lux



LCE17 In panoramic elevators, an opaque wall or corner is provided

Level Changes

128





Automatic doors open at least 3 seconds

Door force less than 135N



Doors provided with sensors at two levels open automatically

2 Braille & tactile signage on the door jamb at 1500mm height



LCE21

Indication sign of accessible elevator direction when various options of vertical circulation

130 [°] Level Changes





Audible signal or voice announcement when reaching each floor $% \mathcal{A}(\mathcal{A})$

Advisory signs indicating safety procedures and other regulatory information





132[°]

Manoeuvring space of 1500 x 1500mm in front the lift access

Calling button height between 700 - 1200mm

Level Changes - Lift Platform, If Provided

LCL



- LCL1 Dimensions of the cabin on min. 900 x 1500mm LCL4 Doors width of 900mm LCL7
 - Inside the cabin, continuous pressing buttons operable with the elbow
- LCL8 Additional external control by authorized person



- **LCL5** Cabin with side protections to isolate users from side walls
- LCL6 Inside the cabin, minimum two handrails at a height of 800mm to 1000mm from the floor
- LCL9 2000mm travel height if open cabin- 4000mm height if full cabin

 $134\degree$ Level Changes



Level Changes - Escalators, Travellators and Mechanical Ramps



LCEs1 Moving surface gradient ≤5%

LCEs2

LCEs3

Contrast pavement with surrounding at the beginning and end of travellator

Marked travel direction

Level Changes - Escalators, Travellators and Mechanical Ramps



LCEs4 Audio system indicating start and end

Level Changes

136

LCEs



Sanitary Provisions











SPpt2 Public toilet within 150m distance

Sanitary Provisions

140





SPpt3 Furniture have a reflectance contrast of at least 30 points LRV
SPpt4 Toilet appliances height between 900 - 1200mm
SPpt5 Toilet appliances automatically activated or operable with the elbow

Sanitary Provisions 141



SPpt6 Door clear width 900mm and comply door requirements
SPpt7 Door latches operable with the elbow installed between 900 - 1200mm
SPpt8 Coat hanger on the door from inside the all cabin doors in the public toilets between 1100 - 1400mm

Sanitary Provisions

142



- SPpt9 If 2 or more urinals, 1 with usable height at 300mm and with grab bars
- SPpt10 Flushing systems are operated by pressing or with a flush handle with large surface and operable with one hand or elbow
- SPpt11 Distance between the grab bars is 500mm
- SPpt12 Grab bars mounted between 700mm from bottom up to 1200mm height





SPpt13 In each toilet block a baby changing board is provided

Sanitary Provisions

144




Non slippery floor surface with Pendulum Test Value (PTV) \ge 45

SPpt15 With wash basins in a row, 1 is accessible



SPpt16 Accessible wash basin clearance from ground surface space ≥700mm high and ≥250mm deep

SPpt17 Usable wash basin surface top height between 800 - 850mm



SPpt18 Faucets (water tap) operated by pressing button or a lever handle or with a sensor (Not turning valve)



SPpt19 SPpt20

148

Distance to the faucet (water tap) shall be less than 600mm and vertical between 900mm and 1200mm. Lower edge of mirror ≤900mm height





Controls and accessories height (soap dispenser, dryer) mounted at height 700 - 1200mm

2 Advisory signs indicating safety procedures and other regulatory information



SPat1 One accessible toilet for each gender in every floor or 1 independent accessible toilet for both genders



SPat2 One accessible toilet within a 150m distance from any part of the building





Sanitary Provisions

152





Maneuvering space diameter of 1500mm inside the toilet

Maneuvering space height between 0 to 700mm free of obstacles







Lateral interaction space on both sides of the toilet or on one side if symmetrical units

8 Lateral interaction space size 865mm x 1420mm



SPat9 Door open outwards or sliding

SPat10 Door with horizontal 300mm grab bar placed between 900 - 1000mm height at 300mm from the hinge side

SPat11 Latch operable with the elbow installed between 900 - 1200mm

SPat12 Coat hanger between 1100 - 1200mm



SPgb1 The space between grab bars and the wall ≥45mm

SPgb2

Withstand a force of 1 kN in any direction





Circular diameter between 30 - 40mm

Horizontal bars height between 700 - 750mm. Support length of 700mm







158

Bars mounted in the transfer space must be foldable

With two transfer areas, distance between both grab bars 670mm and 700mm





Bars mounted in the transfer space must be foldable

With two transfer areas, distance between both grab bars 670mm and 700mm



SPgb7

160

With one transfer area, horizontal bars mounted in wall 300mm from the sanitary edge with 700mm length and mounted 700 - 750mm





600mm vertical bar mounted 700 - 750mm from ground away 700mm from the wall

79 Toilet height between 450 - 500 mm





162

Shower floor surface at same floor level with surrounding area

Drain water slope ≤4%



SPsh3 Dimensions of showers area at least 865 x 1200mm and a seat of at least 400 x 400mm



- SPsh4 Seat located at a height between 450 500mm and separated from the wall between 150 200mm
- SPsh5 Horizontal bar length 800mm mounted 700 750mm from the ground

SPsh6 Two Vertical bars length of 800mm in the lateral wall of the shower seat mounted 800mm from the floor levelSPsh7 Distance between vertical bars between 670 - 700mm



SPsh8 Controls within 500mm away from the shower seat







166

With a folding adult changing board, at height of 500mm from the floor



Additional children wash basin at a height of 500mm



Maneuvering turning space of at least 2000mm diameter

SPff4 With a urinal with usable height of 300mm

SPff5 With emergency call button or rope

Sanitary Provisions - Feeding Room





SPfe

One feeding room within 300m distance

With ventilation system

Furniture with reflectance contrast with the walls of ≥30 points LRV



Surface:

≥7sq. meters for individual ≥10sq. meters for dual

Sanitary Provisions - Feeding Room







168

One feeding room within 300m distance

With ventilation system

Furniture with reflectance contrast with the walls of ≥30 points LRV

SPfe2 Su

Surface:

 \geq 7sq. Meters for individual

 \geq 10sq. Meters for dual

Sanitary Provisions

SPfe





SPab1 Electronic or sensor faucets





SPab2 One accessible ablution unit linked to an accessible path. The closest from the entrance

SPab6 Approaching free space of 1200mm

SPab7 The approaching free space with contrast ≥30 points LRV

 170° Sanitary Provisions



SPab3

Two horizontal bars mounted between 700 - 800mm with the same length of wash basin

SPab4 All Accessories at a height between 700 - 1200mm



Sanitary Provisions - Ablution Areas, If Provided



SPab5 Provides bidet shower system, soap and paper

Sanitary Provisions

172



Changing Rooms









CHR1 Corridors width ≥1000mm and direction changes with manoeuvring turning space of 1500mm
CHR2 Approaching space for lockers, benches and furniture 1420 x 865mm
CHR3 1 of 10 showers is accessible, if provided
CHR4 1 of 10 toilet is accessible, if provided

Furniture







t1 Height of the top ≤800 mm

Clearance depth under the table ≥480mm

Furniture 177





Without sharp edges, protruding Tables without integrated seats

178° Furniture





FUbc2

Without sharp edges, protruding

Seat depth between 400 - 450mm



FUbc1 Seat height of 430mm with a \pm 30mm tolerance

FUbc3 With backrest height between 400 - 460mm

FUbc4 Some seats with armrests

FUbc5 At least in one side has lateral interaction spacem for wheelchair min 865 x 1420mm with international symbol

Furniture 179





FUbc6 Outdoor spaces - benches every 100meters accompanied with shaded areas every 50meters In buildings - benches or seat types every 50meters

Furniture

180
Furniture - Drinking Fountains, If Provided

FUd



- FU1 Without Sharpe edges, protruding.
- FUd1 Two fountains with different heights ≤915mm for the lower one with leg clearance
- Comfortable frontal and lateral approach FUd2
- If manual button, minimum height = 700mm for the lower one FUd3 and maximum 1200mm for the higher one
- FUd4
- FUd5

Water supply between 600 - 900mm height

- With bottle filler
- Clearly visible with contrasting background FUd6

Furniture 181





Not located in the accessible path Trash bin opening height ≤900mm



FUb2 Lateral space of interaction of at least 865 x 1420mm

182° Furniture





FUb4 Trash bins every 50 meters

Furniture 183







When fixed to the walls protrude \leq 250mm

Operable with an elbow if opening mechanism is provided

Well contrasted signage

184[°] Furniture





One frontal or lateral interaction space 865 - 1420mm Floor surface is smooth, non-slippery with a gradient ≤2%

Furniture 185



FUv3	Screen and keyboard are visible from a point located 1000mm above the floor
FUv4	Screen and keyboard with no reflection or glare

FUv5 Control buttons height between 400 - 1200mm and ≥600mm from any corner if exist

186° Furniture







FUv11 Slots are wide and have a funnel effect









Card slot height between 800 - 1200 mm

188° Furniture





FUv8 Visual and acoustic indication system and alarm system provided

FUv9 Audio information provided

FUv10 CCTV intercom provided

Furniture <u>189</u>



FUb1 Outside the accessible path or do not reduce accessible path ≤1200mm

190° Furniture





FUb1 Outside the accessible path or do not reduce accessible path ≤1200mm

Furniture 191

Furniture - Commercial Kiosk: Lateral Interaction





Customer counter with lateral or frontal interaction space 865 x 1420mm



With pargola in the front side for outdoor

Linked to an accessible path

FCK4

Equipped with hearing enhancement system and indicating post



Controls at height of 1200mm

FCK6 Audio and Visual information provided

192 Furniture

Furniture - Commercial Kiosk: Frontal Interaction





Customer counter with lateral or frontal interaction space $865 \ x \ 1420 \text{mm}$



With pargola in the front side for outdoor

Linked to an accessible path

FCK4

Equipped with hearing enhancement system and indicating post



Controls at height of 1200mm

Audio and Visual information provided



FCK

Parking and drop off point









196

Number of accessible parking lots: 2% of the Total Parking, max 10 spots

Accessible spaces as close as possible to the entrance of the building and no more than 50m

Parking and drop off point

Parking and drop off point - Accessible Parking places, access to parking lots





PA5 With lateral access aisle ≥1200mm

PA6

- Signs mounted at 2200mm with international symbol
- PA7

Marked with international symbols







198

2500 x 5500mm for angled parking, 2600 x 6000mm for parking along the sidewalk

With lateral access aisle ≥1200mm PA5

Parking and drop off point

- Signs mounted at 2200mm with international symbol **PA6**
- Marked with international symbols **PA7**
- **PA8** Curb cut with maximum 8% slope



Reserved Seating Spaces





RS1 Number of reserved seats: one reserved wheelchair space for every 50 seats or fraction thereof and beyond 500 seats, one more every 100 seats of fraction thereof, as on general checklist GAU

Reserved Seating Spaces 201

Hearing Enhancement







Hearing enhancement system is provided in the service countres and assembly areas

HE6 International symbol of access for hearing loss is provided, when the system is provided for persons with hearing impairment

Hearing Enhancement °203



	Theating enhancement system is provided in the meeting rooms serving more than 25 perso
HE3	Hearing enhancement system provided in the auditoriums and theaters
HE4	Posted sign to indicate that the enhancement system is available
HE5	Compatible with language translation system

HE7 Induction loop provided when acoustic information is provided

Hearing Enhancement

204



Museums Design Aspects





MD





MD4 Signage of at least 14 pt and well illuminated

Museums Design Aspects ° 207



Accessible Room



h Accessible Room - Hotel Rooms







Accessible Room °209





ARh5 Illumina

Illumination ≥200 lux

ARh5

Accessible Room

Clear route & 1500 x 1500mm free space beside the bed

ARh4

210





ARh7

Electronic outlets at height between 400 - 1000mm



The bed height ≤500mm ARh8



ARh10 Dressing mirror provided with front space up to 2000mm

212 ° Accessible Room



ARh11 Shelves and drawers are provided between 700 -1200mm from the floor and clothes hanger placed at height 1200mm

Accessible Room °213





ARd1 ARd4 ARd6

Accessible path of travel provided to half of dining area (900mm minimum)

10% of the tables shall comply with the dimensional criteria for tables

6 Minimum 900mm clear passage to all food service area

214 Accessible Room





Illumination \geq 100 lux provided in at least 10% of dining rooms

ARd3 Sound reduction materials used in dining rooms, floors and walls made of washable materials

Accessible Room °215





216

Accessible path of travel provided to half of dining area (900mm minimum) The self service tables height located between 900 - 1200mm from the floor) Minimum 900mm clear passage to all food service area

Accessible Room




Accessible path of travel provided to half of dining area (900mm minimum)

ARd7 Spaces for children strollers and mobility devices are provided, 10 seats are movable

Accessible Room °217

General





GD1 Have a free passage width ≥900mm

- **GD2** 900-1200mm handle of opening mechanism height and operable by elbow or automatic
- GD3 40mm free gap minimum between lever (handle) and the door surface

GD4 No round knobs





GD5 Sliding doors with vertical fixed opening bars

220[°] General



GD6 Force to open the door ≤25N

GD7 Swinging door open 90°





Door stoppers provided

GD9 250mm height kick plate provided to doors in high use areas

222 General



GD10 Alternative door provided when there is a revolving door



GD11

Dimensions of maneuvering spaces / one way swinging door comply: On pull side – 600mm space adjacent to the leading edge and 1500 x 1500mm space On push side – 300mm space adjacent to the leading edge and 1200 x 1200mm space

224 [°] General





Dimensions of manoeuvring spaces comply: Sliding doors – 300mm space adjacent to the leading edge and 1200 x 1200mm space



GD13 Dimensions of manoeuvring spaces comply:

Both side swinging door - 300mm space adjacent to the leading edge both sides and minimum clear floor space of 1200mm x 1200mm both sides







GD15 If two aligned doors in a series - minimum space of 1200mm x 1200mm clear between them



GD16 If two angled doors in a series - minimum space of 1200mm x1500mm clear between them

228 $^\circ$ General





Without projections ≤2200 mm into the pedestrian area

4 Operable window at 1200mm height



Fixed glazing at maximum of 900mm height

/5 With guardrails if window opening <1200mm





Opening mechanisms not require wrist turning

230 0 General



- **GS1** Located between 900 1200mm height and located ≥600mm from any corner
- **GS2** Switch plates with contrast of 30 LRV against its background
- **GS3** Switches can be activated with the elbow

General - Glass Surfaces: Surfaces: Glass Surfaces more than 500mm width or 850mm height



GG1

General

232

- Glazed surfaces are identified clearly from adjacent doors or other openings
- **GG2** Presence of two horizontal bands of 100mm width with color of 50 LRV or any other pattern or design occupy 50% of the area between 850 1600mm, without empty space bigger than 500mm wide
- **GG3** First horizontal band height between 1400 1600mm from the ground level Second horizontal band height between 850 1000mm from ground level

GG

General - Glass Surfaces: Surfaces: Glass Surfaces more than 500mm width or 850mm height



General 233

GG1

Glazed surfaces are identified clearly from adjacent doors or other openings

GG2 Presence of two horizontal bands of 100mm width with color of 50 LRV or any other pattern or design occupy 50% of the area between 850 - 1600mm, without empty space bigger than 500mm wide

GG3 First horizontal band height between 1400 - 1600mm from the ground level Second horizontal band height between 850 - 1000mm from ground level

GG

General - Mailbox,Garbage,Parking meters and Recycling containers



- GM1 With frontal or lateral interaction space 865 x 1420mm
- GM2 Interaction mechanisms height between 700 1200 mm
- **GM3** At least one garbage container can be opened with one hand and force < 25 N

234 [°] General

GM

General - Mailbox,Garbage,Parking meters and Recycling containers





General °235

GM



GR1 No invading accessible path and headroom

No interruption of guidance elements

- GR4
- Accessible path \geq 2000mm adjacent to the restaurant terraces
- GR5 Bollards between terraces and road every 1200 mm
- **GR3** Protected by continuous element unless all features height ≥ 900mm

236[°] General

GR2





GBsh2

Not invading accessible path



GBsh4 Height ≥2200mm

- **GBsh5** No obstacles between shelter and access to bus
- **GBsh6** Glazed walls with indication and warning marks, if provided
- **GBsh11** Boarding area platform with tactile warning surface





Manoeuvring space ≥ 1500 mm diameter inside the shelter Glazed walls with indication and warning marks, if provided Boarding area platform with tactile warning surface

238[°] General





With fixed bench + seat height 400 - 460mm, depth from 400 - 450mm, backrest ≥400mm

GBsh8 With armrest on one of its side



GBsh9 With standing support (perch seat) of height between 700 - 750mm and separated ≥200 mm from wallGBsh10 Average illumination ≥50 lux, and ≥100 lux at boarding time







GBs3

Sign post provided



Not obstructing the accessible path

GBs4 Bus information height between 1200 - 1600mm



Clearance height ≥2200mm without protruding





GBs5

Bus line identification number with text height \geq 140mm and Tactile

242° General



GAE1 GAE3 GAE5 Audio and visual emergency alarms provided



Visual Emergency alarm with 30 flashes per second

Accessible means of egress signage

Procedures for evacuation building including procedures for persons with activity limitation are posted

GAE6 Procedures posted in 14 pt San serif font





GAE7

GAE

Other evacuation solutions for persons with activity limitation with assistance of an evacuation devices including protected elevator or chair

GAE8 Evacuation devices or chair are provided in every floor located near the evacuation stairwell

GAE9 Fire personnal and persons with activity limitation are trained to use evacuation devices





GGe1

In case of segregated use by gender, same level of accessibility for both genders



GS1

Approaching space 1420 x 865mm



Corridor width ≥1000mm

GS3 Maneuvering turning space 1500mm

GS4 20% of shelves or lockers are in a reaching height distance between 600 - 1200mm

246[°] General





With an accessible door and path to the treatment area

GF2 With adult changing table

 $_{\text{General}} \circ 247$



GB4 Minimum dimension balcony 1500 x 1500mm

248[°] General





GAU1 Connected to accessible path, and accessible seatings places are permenantly provided or removable seats





Dimension of wheelchair seating space 865 x 1420mm if frontally approached or 865 x 1500mm if laterally approached

250[°] General





GAU4 With international symbol of access (ISA)

GAU5 Maximum longitudinal gradient 1% for wheelchair and manoeuvring space





252

Wheelchair spaces are arranged into groups of two spaces with equal numbers of fixed seats in every group row Number of reserved seats: one reserved wheelchair space for every 50 seats or fraction thereof and beyond 500 seats, one more every 100 seats of fraction thereof

General


- GAU8 Clearly visible space for sign language interpreter with overhead light
- GAU9 Designated accessible seats for people with hearing impairments in front of the sign language interpreter
- **GAU10** Aisle seats and its adjacent have foldable armrests
- **GAU11** Some seats have spaces to serve pets



GST1 Stage is accessible via ramp or lift



GST2 Accessible backstage for capacities \geq 100 spectators







With accessible entrance, chair lift, ramp or hoist

With safety ladder

GSW5 Pendulum test value ≥ 45 of the floor surface of the swimming pool area







GSW4 With depth scale sign according to font size and reading distance standards







GWA1 All parks entrances shall display a visual and tactile map of the main facilities, displaying the North symbol at the top of the map with oral information, if required

258° General





GWA2 Tactile maps in required buildings

GWA3 Dimension of the tactile map ≤800 x 450mm and the font size >20mm San serif type

GWA4 The height of tactile map horizontal or inclined from the floor 900- 1200mm and the inclination between 30° to 45°







If fixed vertically, located between 1250 - 1750mm

The location of the tactile map on the right side near the door within 1000mm and near the stair or elevator in the multistory building







GWA7 All public buildings have the name and Makani number on façade and directory inside the lobby







In buildings, orientation signs every 30 meters, including exit and toilets and other services

Directional signs are simple, clearly visible, good shape and well organized with no duplicated information and with reflectance contrast ≥50 LRV













GWA10 In parks and open spaces orientation sign every 70 meters for nearest exit and nearest toilets







All door frames with information signs in public buildings

Letters, numbers, symbols and pictographs are not glare and high reflectance contrast

12 Includes both Arabic and English languages





GWA14 GWA15

Braille character located at the bottom left of the destination sign at distance of 10 - 30mm, according to ISO 7000 : 2004 standards Pictograms and symbols follow ISO 7000 : 2004 standards



GWA16 Symbol height ≥ 30mm and thickness 2 - 5mm for letters and 2mm for symbols







GWA17 Signs at walls located at height 1200 - 1600mm on the left side of the door

268° General





Exit and evacuation pictogram according to ISO 3864 - 1 : 2002

GWA19 Digital screens located at height 1700-2000mm, with slight inclination (150 - 300) and visible from a minimum distance of 1000mm

General - Way Finding



GWA20 Signs Font size according to reading distance

270 General

GWA

According to reading distance:

GWA20		
Reading distance	Minimum Font Size	Recommended Font Size
≥50 meters	170mm	200mm
20 meters	140mm	180mm
5 meters	70mm	140mm
4 meters	56mm	110mm
3 meters	42mm	84mm
2 meters	28mm	56mm
1 meters	14mm	28mm
0.5 meters	7mm	14mm

GWA20 Signs Font size according to reading distance





GWA21 Signs out of the accessible path and clear headroom ≥ 2200 mm

272° General



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