



Accessibility Needs for Wheelchair Curling Events

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This document considers most common international wheelchair accessibility standards and combines these with World Curling Federation requirements to provide guidelines for hosts of the WCF Wheelchair events. National or local wheelchair accessibility guidelines may be applied besides this document.

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Building Accessibility

At least one entrance per facility should be accessible to a wheelchair user. If any areas designated for athletes or team officials have slopes that are steeper than 1:20 or stairs, make sure that ramps or elevators are available, and that they are correctly designed.

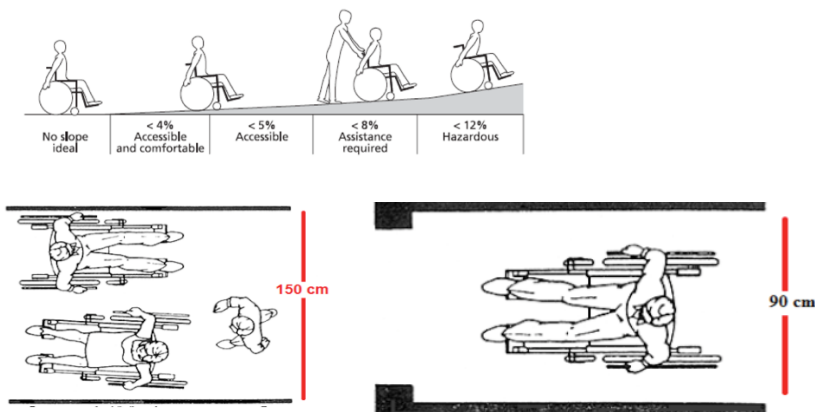
Parking

Parking spaces for team cars must be reserved near the accessible entrance to the venue. The space must be large enough for wheelchairs to get on and off the vans. Make sure there is enough room for side-entry and rear-entry minivans.



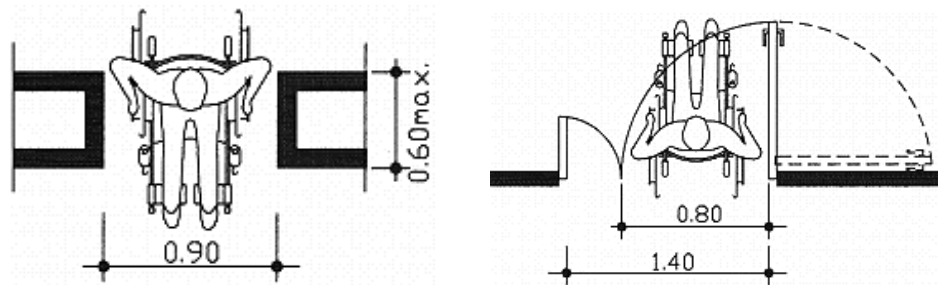
Corridors and doors

The minimum width of an unobstructed pathway should be 0.90 m. The minimum width of a two-way wheelchair traffic passage is 1.50 m. The slope of an accessible path should not exceed 1:20. Pathways with a slope of more than 1:20 should be designed as ramps. The surface of an accessible pathway should be smooth, continuous, non-slip and even.

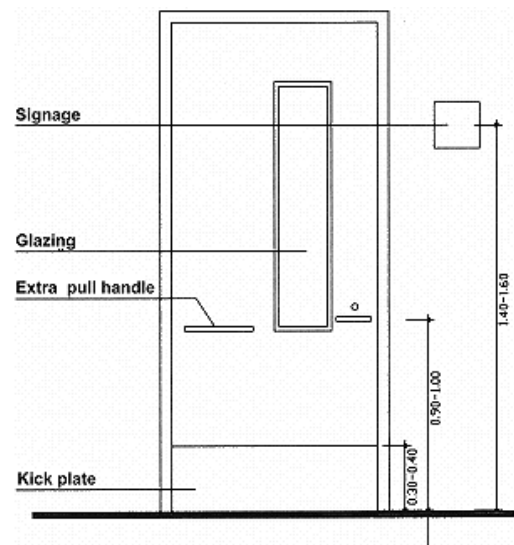


Accessible doors should be so designed as to permit operation by one person in a single motion with little effort. Power-operated doors are the best for people with disabilities. The activator system should be automatic or placed within easy reach. An accessible door should have the following features: a sign, a door handle, an extra pull handle, glazing and a kick plate. Thresholds should be omitted wherever possible. The threshold should not be more than 20 mm higher than the finished floor level.

For exterior doors, the minimum opening is 0.90 m when the door is open. For interior doors, the minimum opening is 0.80 m when the door is open. For double-leaf doors, at least one leaf should have a minimum clear width of 0.80 m.



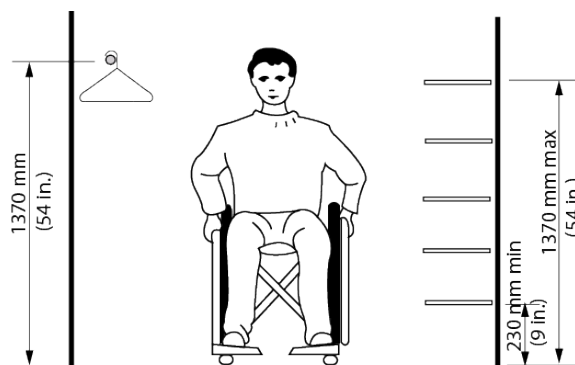
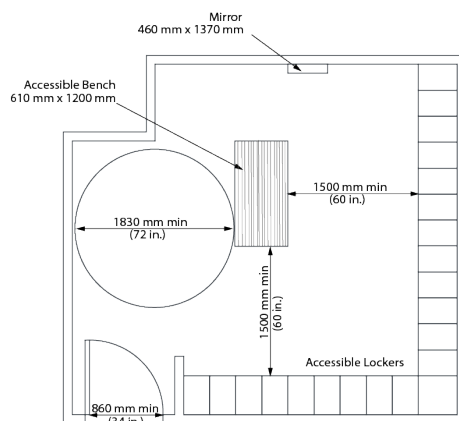
Operational devices on doors, such as handles, pulls, latches and locks, should be easy to grasp with one hand. Extra pull handle: To facilitate closing, a door fitted with spring closers should be equipped with an extra pull handle approximately 0.30 m in length, located between 0.20 m and 0.30 m from the hinged side of the door and mounted between 0.90 m and 1.20 m from the floor. Outward swinging doors and doors in public corridors should have low windows to enable users to see oncoming traffic. The bottom edge of the window should not be higher than 1.00 m from the finished floor level



Venue interior

Changing rooms

Changing rooms must comfortably accommodate all participating teams (5 players + 2 Team officials per country). Changing rooms are designated by countries. There are no showers required, however at least one accessible toilet in the changing rooms is recommended. Accessible storage units shall have their bottom shelf no lower than 0.30 m and their top shelf no higher than 1.20 m above the floor. Aisle spaces in front of lockers and baggage compartments should be a minimum of 1.30 m deep and 0.80 m wide, to permit forward and lateral approach by a person using a wheelchair. (Pic. example of the accessible changing room)

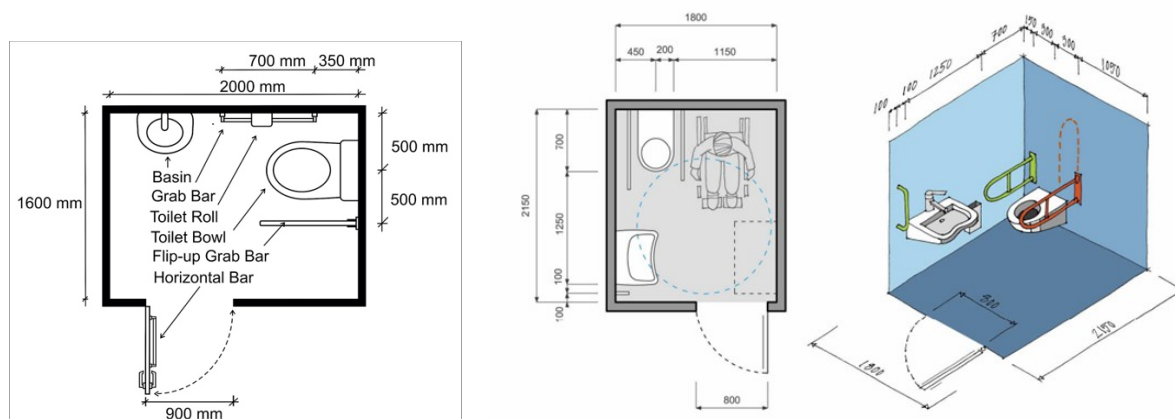


Toilets

There should be enough accessible unisex toilets for athletes and team officials (in authorised access areas) and wheelchair spectators (public areas) in the venue. To accommodate needs of the athletes during an event there should be at least 6 fully accessible or temporary accessible toilets with an easy access to the field of play.

The width of the entrance must be at least 0.90 m. It is recommended the door opens outwards. The doors shall be fitted with a horizontal handle at a height from 0.80 to 0.90 m from the inside. The door lock must be unlockable from the outside in case of emergency.

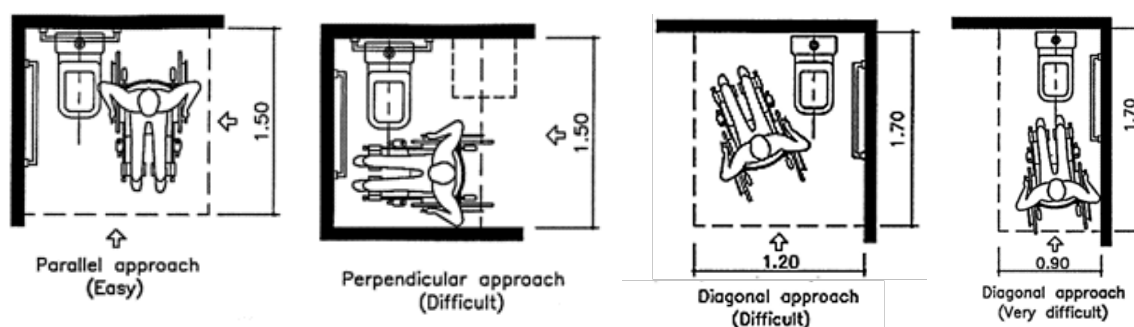
The fully accessible toilet cabin must be at least 1.60 m wide and at least 2.00 m deep. It is recommended the temporary accessible toilet cabin to be at least 1.50 m wide and at least 1.50 m deep to allow parallel approach. Turning circles of 1.50 m diameter are recommended inside the rest room to allow for full turn manoeuvring of a wheelchair.



The cabin must be equipped with closet seat, sink, clothes hook and space for a trash can. All accessories, such as soap, towel and toilet paper dispensers, should be placed at a height between 0.50 m and 1.20 m above the floor.

The control of the flushing device must be located on the side from which there is free access to the closet seat, not more than 1.20 m above the floor. The flushing device located on the wall should be within reach of a person sitting on the closet seat. Single-lever mixing-type faucets, which are easily operated by hand or elbow, are recommended. Faucets with push buttons are also convenient. Grab bars should be mounted on the wall behind the closet, or on the side wall closest to the closet, or mounted on the floor at the edges of the seat. Grab bars should be mounted at a height between 0.85 m and 0.95 m from the floor.

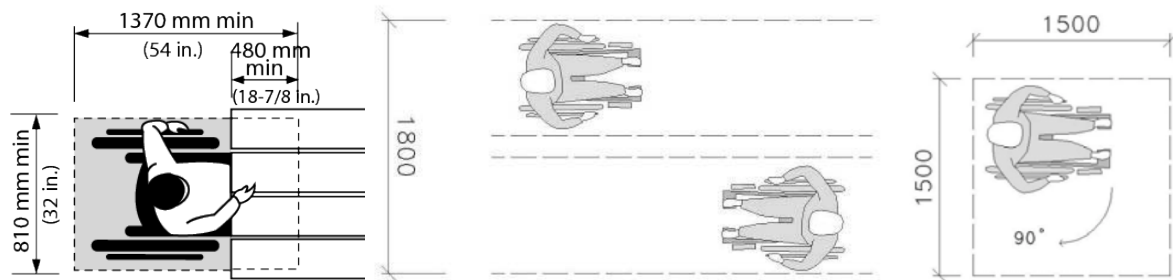
The ease of transferring from a wheelchair to a closet seat depends on the approach. In general, there are four different approaches:



Coach Bench

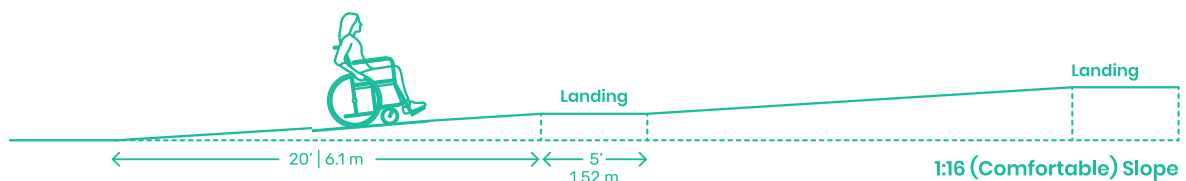
Coach Bench must be fully wheelchair accessible from the Field of Play (FOP). There are 3 spots available for each team. Usually there are two chairs and one spot for wheelchair at the team table. Coach bench must be equipped by accessible tables. Wheelchair seating spaces shall incorporate a clear floor space that is 1.30 m x 0.80 m.

To enable two wheelchair users to pass on a pathway, a minimum unobstructed width of 1.80 m is recommended for the coach bench platform behind the tables.

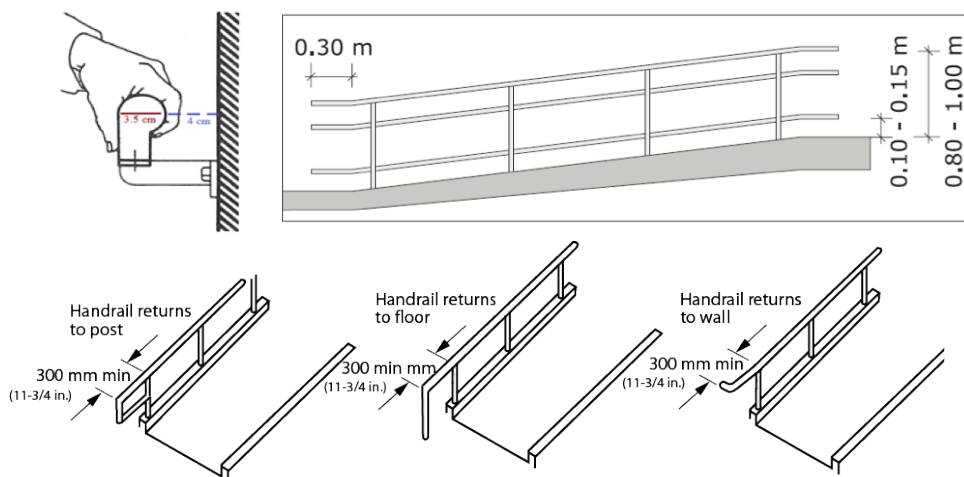


Ramps

Wheelchair safe ramps must be at least 1500 mm wide and their longitudinal slope must not exceed 1:16 (6.25%) and their transverse slope not more than 1: 100 (1.0%). A ramp longer than 9.00 m must be interrupted by a landing platform at least 1.50 m long. Ramps shall have level landings at the top and bottom of each run and also where the ramp changes direction. Ramp and landing surfaces shall be firm, stable, and slip resistant.

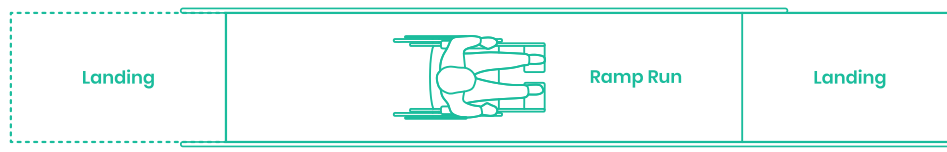


Ramps shall be equipped with handrails and edge protection.

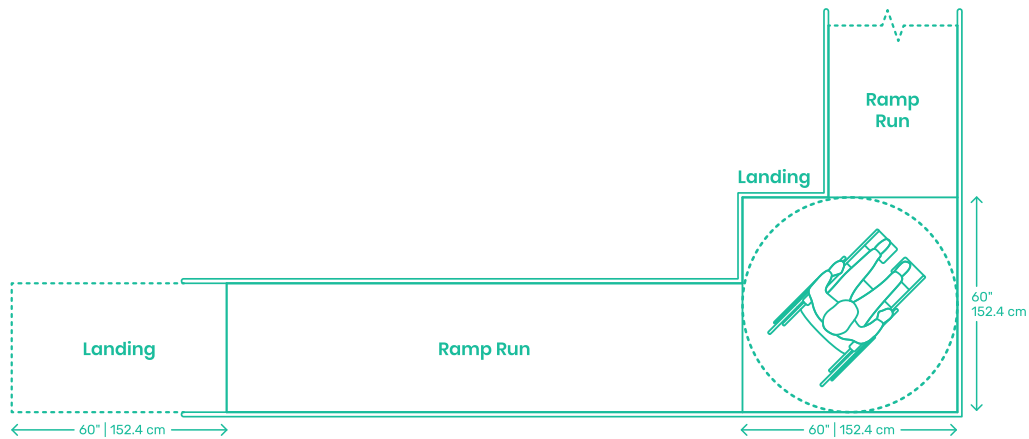


Types of ramps recommended for access to the FOP:

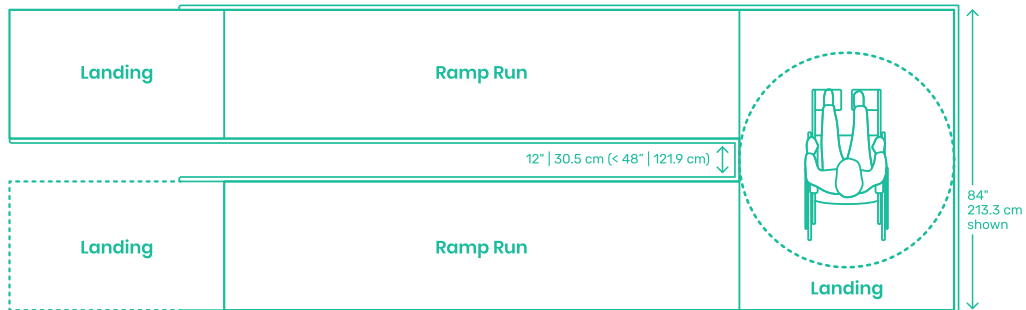
Straight Run Ramp



Turning Ramp



Switchback Ramp



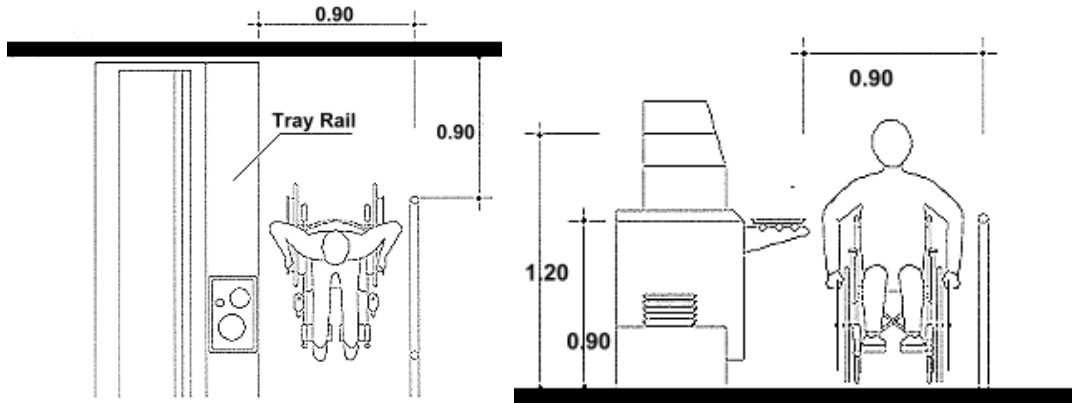
Example of combined (ramp + stairs) access to the Coach Bench



Slope calculator tool: <https://www.to-calculate.com/construction/slope-gradient.php>

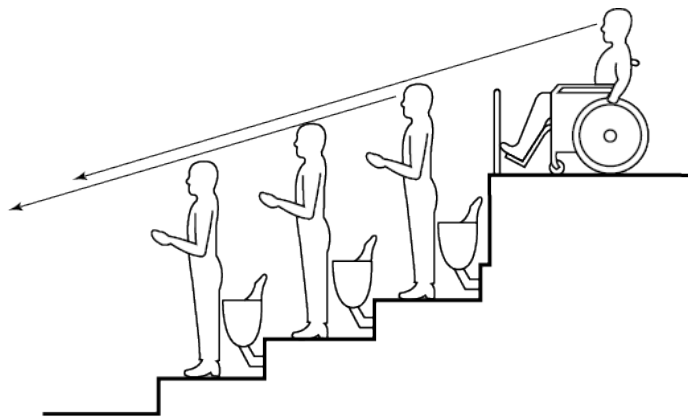
Catering facility and Team Lounge

In case of self-service catering tray slides and counters should be mounted 0.90 m from the floor. Food shelves should be mounted at a maximum height of 1.20 m. Round table for each team 8 people (5 wheelchair users + 3 chairs) is preferable.

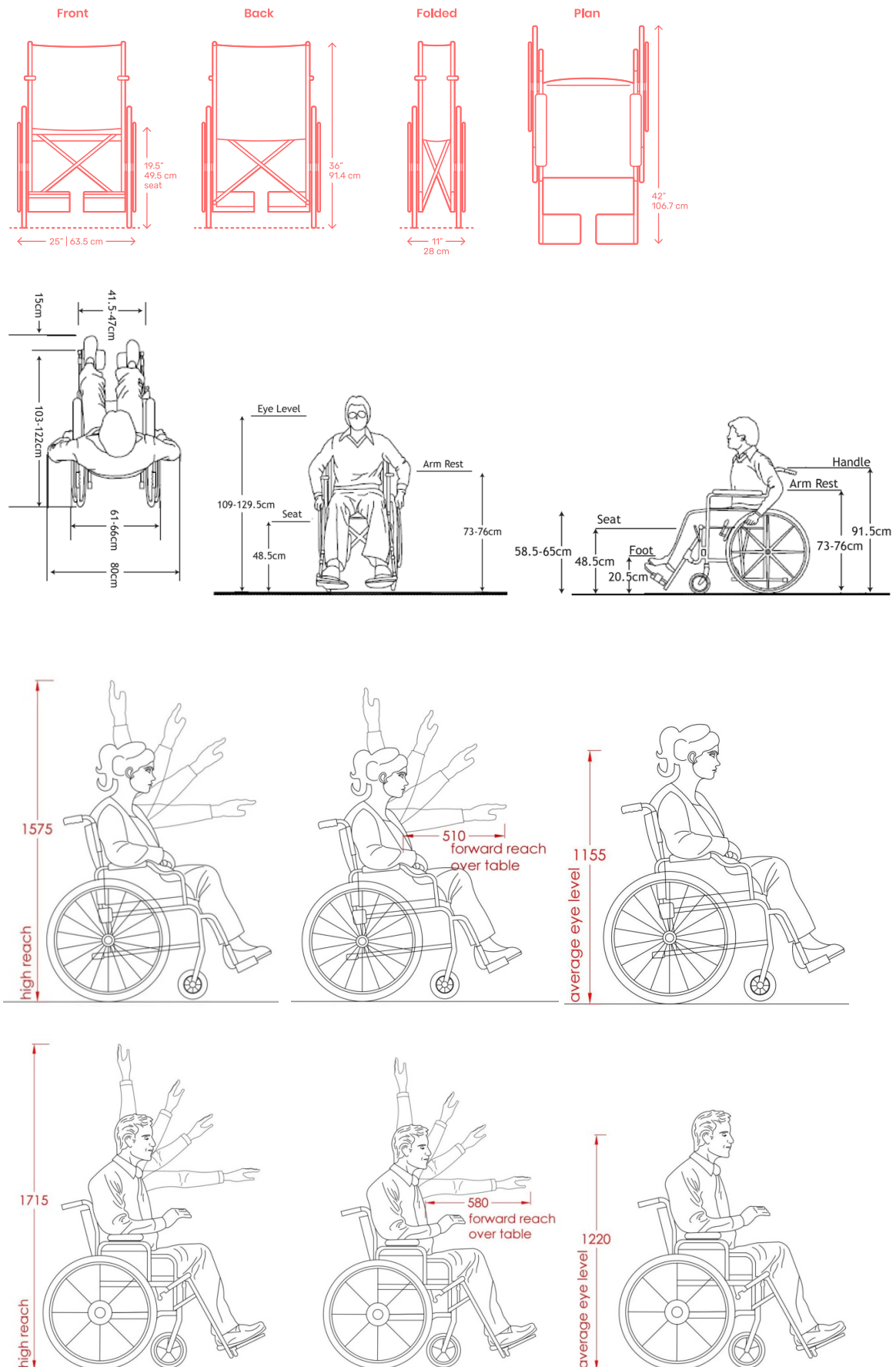


Accessible seating for wheelchair users spectators

Spectators' seating areas should be provided for wheelchair users. Viewing areas need to provide adequate space to manoeuvre a mobility device as large as a scooter and should not be limited to one location. Designated companion seating should also be provided. Guards placed around a viewing area should not interfere with the line of sight of someone sitting in a wheelchair.



Basic dimensions



Resources:

Accessibility for the Disabled A Design Manual for a Barrier Free Environment:

<https://www.un.org/esa/socdev/enable/designm/index.html>

Accessible Components for the Built Environment: Technical Guidelines embracing Universal Design:

<http://www.unicefinemergencies.com/downloads/eresource/docs/Disability/annex12%20technical%20cards%20for%20accessible%20construction.pdf>

Vyhláška Ministerstva pro místní rozvoj ČR

č. 398/2009 Sb. o obecných technických požadavcích zabezpečujících bezbariérové užívání staveb:

http://www.mmr.cz/getmedia/f015224c-ff91-4cad-a37b-dc0dc1072946/Vyhlaska-MMR-398_2009

City of Mississauga 2015 Facility Accessibility Design Standards:

http://www7.mississauga.ca/Departments/Marketing/Websites/Accessibility/Mississauga_FADS.html#a4.1.12

Dimensions Guide:

<https://www.dimensions.guide/collection/wheelchair-users>

Metric data 03 average dimensions of wheelchair user:

<https://www.firstinarchitecture.co.uk/metric-data-03-average-dimensions-of-wheelchair-user/>