SEATING GUIDELINES FOR CLASSES 2.0-2.5

WHEELCHAIR BASKETBALL CANADA

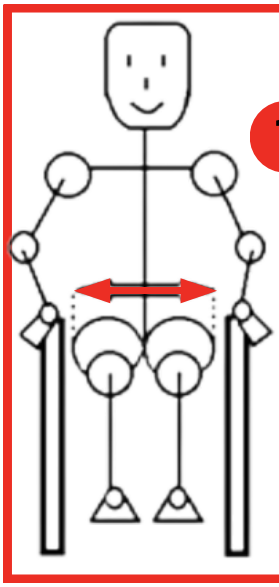
Class 2.0 and 2.5 athletes generally:

- can lean halfway forward and return to upright without arm support
- can sustain the weight of the ball without inclining their back over the backrest
- can lean into their pivot
- can brake hard without losing balance
- have limited ability to maintain balance in reaction to
- moderate forward contact or minimal side contact
- may be at risk of developing pressure sores

Proper seating will allow the athlete to:

- start their push comfortably at 12 o'clock
- lean approximately 45° into the push
- rotate the upper trunk to shoot or pass
- pick up a ball against the wheels and forward against the toes
- reach for a rebound with both hands
- prevent pressure sores

STEP BY STEP

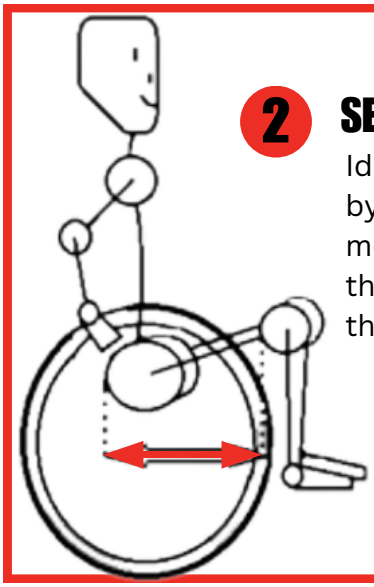


1 SEAT WIDTH

Ideal seat width can be found by trying different chairs or measuring sitting width.

There should be minimal space between the athlete and the side guards. Allow extra space if the athlete develops pressure sores at the sides of the hips.

TIP



2 SEAT DEPTH

Ideal seat depth can be found by trying different chairs or measuring from the back of the pelvis to 2" (5 cm) behind the knee.

3 CUSHION

Several class 2.0 and 2.5 athletes can use a regular 2" (5 cm) foam cushion.

TIP

Some athletes may need a therapeutic cushion to help prevent pressure sores.

4 WHEEL SIZE

Recommended 24” (540mm) for women and 25” (559mm) for men.

TIP Smaller wheels make acceleration easier; larger wheels offer a higher top speed and can be a better anatomical fit for some players.

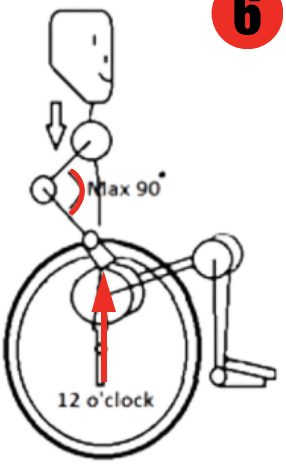
5 CAMBER

(angle of rear wheels in relation to the ground)

Recommended 16°-18° for class 2.0 and 2.5 athletes.

A wider base makes the wheelchair more responsive; a narrower base can fit into tighter spaces.

TIP

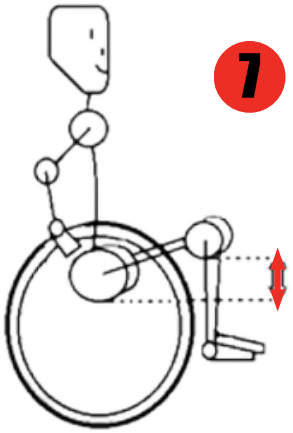


6 REAR SEAT HEIGHT

- athlete's fingertips should be close to the axles of the wheels
- athlete should be able to place hands at 12 o'clock without hiking their shoulders
- elbows should be bent at a maximum of 90°

A lower rear seat height allows the athlete to:	A higher rear seat height allows the athlete to:
• get up more easily from the floor after a fall • lean more easily on wheels for support	• reach higher up when catching or rebounding • be closer to the basket when shooting

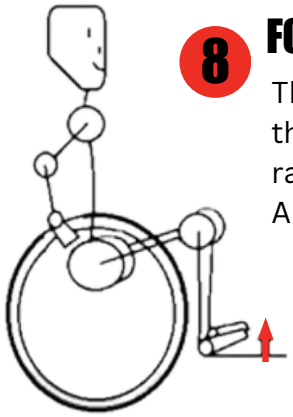
TIP No matter the seat height, the athlete should always be low enough to pick up a ball off the floor using the rear wheels.



7 FRONT SEAT HEIGHT

The maximum front seat height for class 2.0 and 2.5 athletes is 63 cm.
Typically, class 2.0 athletes benefit from having their front seat height 2" higher than their rear seat height.

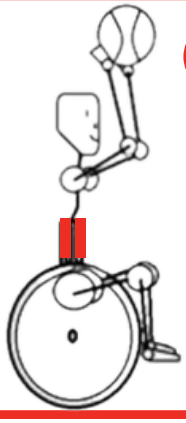
Lower placed knees:	Higher placed knees:
• allow the athlete to reach further forward and pick up the ball more easily from the floor	• provide stability in the forward plane • ensure the athlete's pelvis does not slide forward



8 FOOT PLATE

The foot plate should be high enough to sustain the weight of the lower legs, yet low enough to not raise the thighs off the seat.
Ankles should be positioned directly under knees.

TIP If the athlete has very flexible ankles or tends to have spasms, the balls of the feet should be positioned higher than the heels.



9 BACKREST

- The backrest typically does not need to be angled back.
- It should be loosened to provide some side support.
- The typical height is up to the waist.

TIP The backrest serves to support the lower trunk of class 2.0 and class 2.5 athletes, while leaving the upper trunk free to move forward and rotate.

10 STRAPPING

- Feet may be strapped to the footrests.
- Knees should be kept together and secured with an over the knee strap.
- Pelvis should be secured to the chair using a ratchet strap positioned as near to the hips as possible.
- A lower abdominal strap (just below the belly button) will often be useful for class 2.0 athletes.

TIP Athletes who have significant spinal deformities may not be able to use an abdominal strap.

11 FRAME LENGTH

Longer wheelchair frame	Shorter wheelchair frame
● allows athlete to keep defenders farther away while shooting or passing	● lighter wheelchair ● can pivot within a tighter space

12 ANTI-TIP CASTERS

- Class 2.0 and 2.5 athletes with 2 back wheels will benefit from additional stability when leaning back over their backrest to shoot, pass, or pressure a shooting opponent.
- Those with one back wheel will be able to keep the opponent slightly farther away from the ball when leaning back to shoot or pass.
- The back wheels should be low enough to avoid rocking back and forth when leaning forward and back.
- They should be high enough to prevent the rear wheels from spinning.

13 SIDE TO SIDE ASYMMETRY

Several class 2.0 and 2.5 athletes are asymmetric at rest or while pushing and pivoting. This may be due to knee or hip contractures (lack of mobility), or pelvic asymmetry (one hip higher than the other).

Possible solutions:

- Knee contracture: shorten seat depth
- Hip contracture: lower one knee
- Pelvic asymmetry: extra support under the lower hip, typically with a firm foam wedge

14 CENTER OF GRAVITY

Class 2.0 and 2.5 athletes typically benefit from a slightly more aggressive COG adjustment than class 1.0 players (i.e. the weight of the player is positioned slightly closer to the front than the rear).

Less aggressive COG	More aggressive COG
● more stability when shooting and leaning back	● more speed ● more maneuverability

Every athlete is different, and finding the right chair fit can require a lot of trial and error. Don't get discouraged if something doesn't work right away, get creative finding a solution!

Seating of athletes should follow the Wheelchair Basketball Canada Rule of Two Guidelines. For more information, visit wheelchairbasketball.ca/the-sport/safe-sport

WHEELCHAIR BASKETBALL CANADA

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