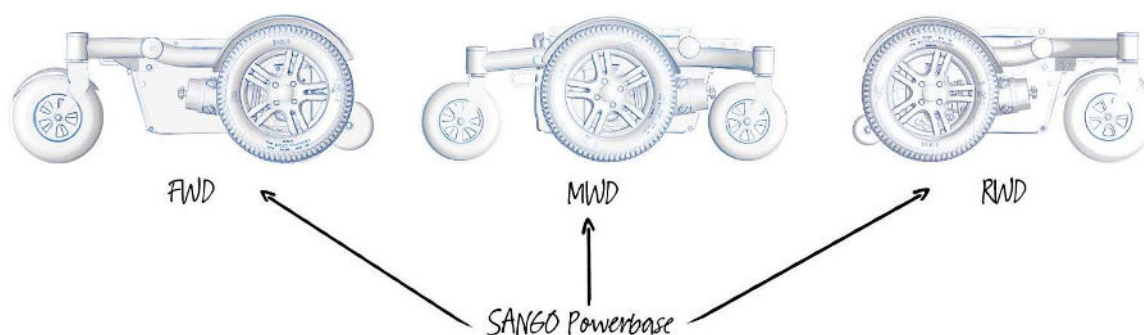


# Chassis types for the best performance from your electric wheelchair

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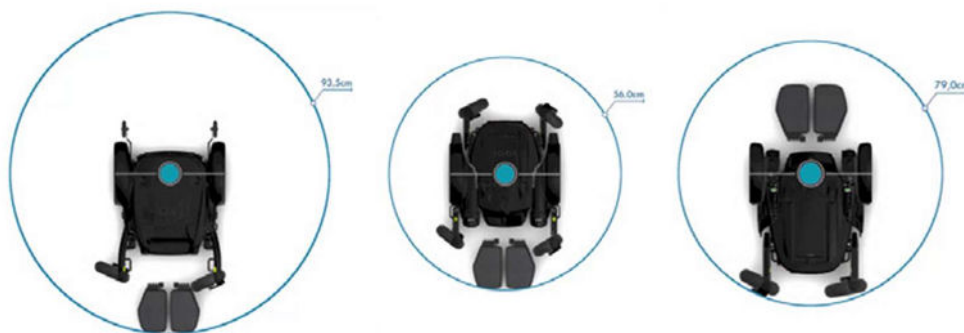
One fundamental choice, which in our opinion should always be the first, is which chassis type will best serve what you need for your electric wheelchair to perform to its best in the environment and surrounds that you will be using it in the most.

Mid, rear or front wheel drive chairs will all offer different benefits and compromises.



## Points of Comparison:

- Location of user centre of mass
- Turning circle
- Turning aspect/position
- Manoeuvrability
- Indoor or outdoor use
- Space requirements
- Overall wheelchair size
- Training Requirements



*Turning Radius. – Rear Wheel Drive,*

*Mid-Wheel Drive,*

*Front-Wheel Drive*

## 1/ MID WHEEL DRIVE (MWD)

The drive wheels are directly under the user in the centre of the chassis, with two castors wheels in front and a further one or two behind.

Often found to be the most intuitive to drive and allows for the tightest turning circle. The front and rear castors also provide further stability.

In some instances when using on uneven terrain or steep ramps the front or rear castors can cause the drive wheel to lift off the ground and lose traction.



## 2/ REAR WHEEL DRIVE (RWD)

The drive wheels are at the rear of the chassis with two castors at the front.

This offers a very stable base and straight line driving, particularly at higher speeds in outdoor environments.

In some indoor environments this may not be the best option as it has the largest turning circle when fitted with swing away leg rests.



## 3/ FRONT WHEEL DRIVE (FWD)

The drive wheels are at the front of the chassis with two castors at the rear.

Having larger wheels at the front can offer much smoother obstacle climbing and also copes better if there is more weight distributed towards the front of the chair.

With the majority of the chair 'behind' the user it can take a longer time for finding the drive as intuitive as the other options. Modern (gyro) technology has meant you can now have a FWD chair that feels very stable to drive.

