

Gate Motors

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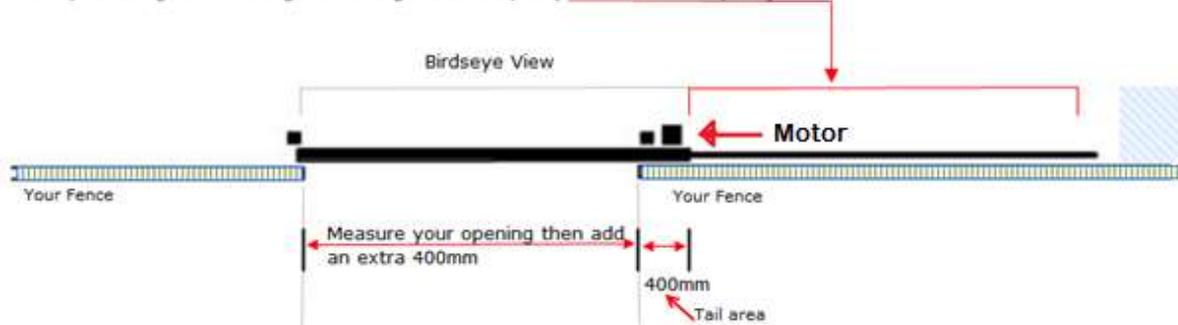
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All you need to know about sliding gates

Measuring the gate

Have you enough area in length for the gate when open (called the back space)



Above is a bird's eye view of a typical gate. To determine the gate size you need, measure the opening and add 350 – 400mm.

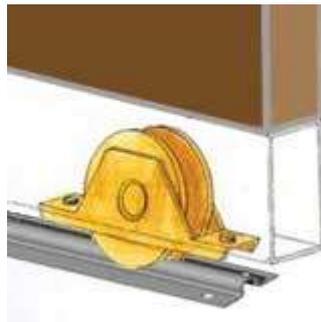


Getting the gate to slide

In order to get your gate to slide you will need some external hardware in place. This will consist firstly of the track which will be fixed to the ground. This is called half-round drilled track which we supply in 3m lengths. The total length that you will need is double the length of

your gate. However you may not want to put the track all the way across the drive because the wheels will be set in usually a metre or so. If you leave it short then it gives a chance for any surface water to get out.

Secondly you will need the wheels which will be fixed onto the gate and slide across the track. We can supply them in a pair. The standard wheels we supply can cope with a gate up to 800kg (400kg per wheel); however we do have ones that are more for heavy-duty use which will do up to 1400kg. You can obviously put more than two wheels onto a gate if it is fairly heavy.



Where do the rollers fit onto the gate?

To determine whereabouts to fit the wheels onto the gate, you need to take the gate size including the overhang and divide it by four, then take off another 10-15%. So a 10m gate / 4 = 2.5 then - 10% = 2.25m. The result is the distance from each end of the gate to the centre of the roller. This means the weight is shared equally onto each wheel and will stop the rocking effect.



How to concrete in the floor track

Cut out and remove about a 150mm wide strip. Level the area with stone and compress. Lay the floor track in the trench and use the joining pins to join the lengths together. Level with a straight long edge and spirit level while aiming to keep the bubble of the level within the lines. On a loose substrate hammer small pins to either side of the track every 450mm. When it becomes tight weld it to the rack and cut off the excess. Lastly using concrete, backfill the top 13 – 15mm of the 20mm bar that's showing.



Plunge the track into the cement casting carefully verifying that it creates a single body with the same. The cement must necessarily enter in the whole internal part of the Profile; this will avoid noise production during the opening and closing of the gate.



Once the track has been plunged into the cement casting, check with a level the levelness of the track, in order to assure a perfect movement of the gate.



Make sure the gate was installed properly and check that the cement forms a single body with the track. Before installing the sliding gate, make sure that the cement has become solid.



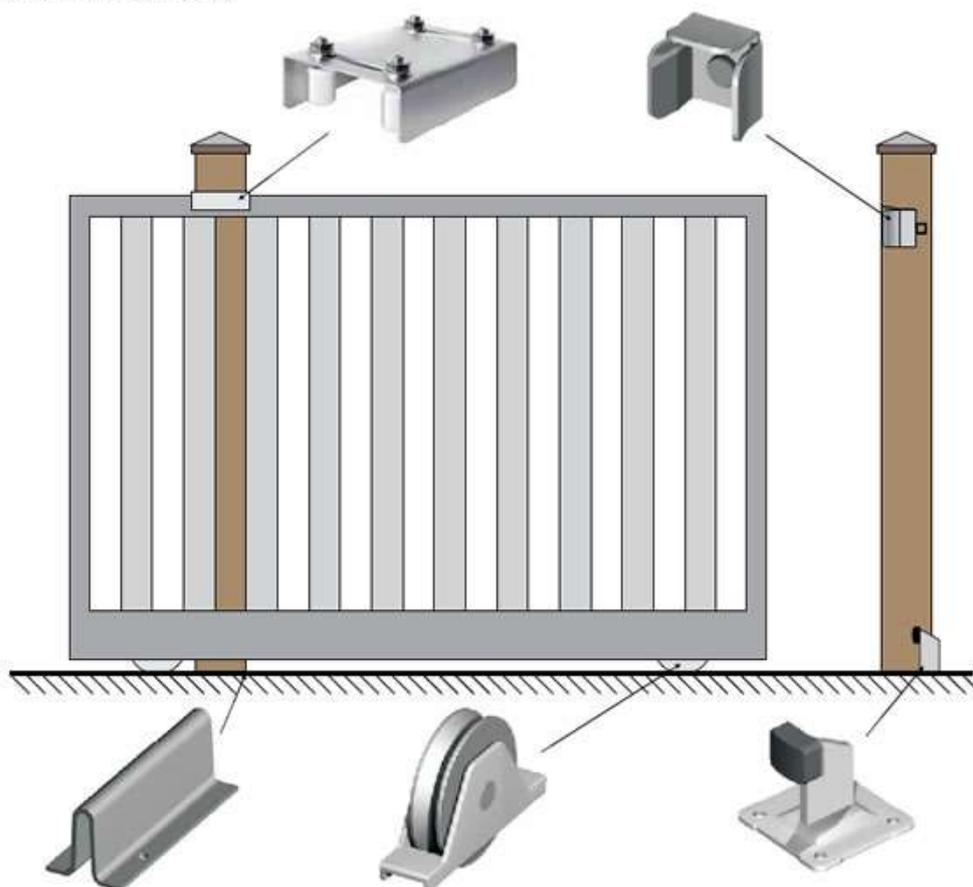
What if traditional track and wheels aren't suitable for my gate?

We do have something called a cantilever system which people may go for if they have un-even ground. With a cantilever system the wheels would slide across the track which would be fixed to the gate, rather than the track being fixed to the ground and the wheels sliding across the track. However a cantilever system is a more expensive route and should be avoided if you are able to use traditional track and wheels.

How to stop the gate falling over

We have a piece of hardware in order to keep the gate upright which is an upper guide bracket. This is attached to the gate post and feeds through the gate while it's moving. It comes in different

Standard hardware kit layout



versions and sizes depending on the width of the top of the gate. Its sole purpose is to stop the gate falling over.

Also on opposite end where gate rests when open.

Where does my support post need to be?

The support post will need to be put in level with the edge of the gate pillar on the side the gate opens back to. This post means you will be able to attach the upper guide bracket to it in order to support the gate.

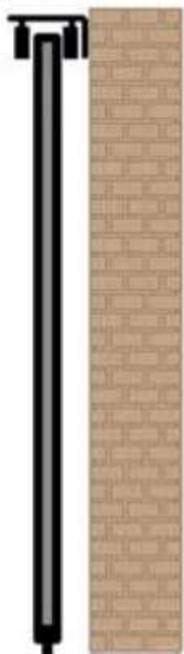
What rack do I need and where does it attach onto the gate?

The nylon toothed rack we supply is suitable for both wooden and metal gates. It is included in many of the automation kits that we sell such as the MyStrike and MyRoller. The rack usually fastens on a minimum of 80mm from the bottom of the gate frame. The rack comes in 1 metre lengths and the total length you need will be the width of your gate.

Other sliding gate hardware



Upper guide bracket



A bracket attached to a pillar, a brick wall, or even an already existing post.



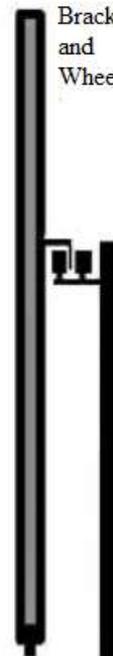
Nylon guide roller set



A bracket each side holding a roller in each bracket



Bracket and Wheels



A bracket holding 2 x 40x60 rollers angle iron needs to be 50x50

All our sliding gate hardware is sold separately to the kits.

An alternative to supporting your sliding gate

Below you can see a sliding gate with a support post. Attached to the post are guide wheels which feed through a guide channel attached in this instance near the top of the gate.



Supporting a gate in this way is good if you are converting a swing gate into a sliding. It may not be sufficient to install traditional hardware such as upper guide brackets or nylon rollers as there may not be the suitable posts in place.

Cable for power and wiring for components

To get power to your gates you will need 3 core SWA armoured cable. For wiring the photocells or other devices such as push buttons/keypads/key switches you can use alarm/cat5e cable. You could purchase wireless photocells which would eliminate cabling on one of the photocells, meaning you can place the wired photocell on the post nearest the motor as control units for sliding gates are housed inside the motor.

How to choose the best kit for your gate

To determine which kit would be best suited for your gate we suggest finding out the width and weight of it first. Once you've done that you can have a look at our different kits and see which motor would do the job you require. Each sliding gate kit comes with the motor itself, a control unit which you wire everything in to, remote control(s) for accessing the gates, photocells for gate safety and release keys for disengaging the motor.

Other access control

You can purchase in addition to the gate kit various forms of access control, if you would like to use something other than the remotes to operate the gate. We have components such as push buttons, keypads, key switches, intercoms and loop detectors. These would be ok to install to the automation at any time so if you felt 6 months after purchasing that you would like one of those options then that is certainly possible. All of our access control is available to view and purchase from our website.

Safety Options

It is recommended to purchase an additional pair of safety photocells to go on the inside of the property as the ones that come with the kit go on the outside. You therefore have protection on both sides. You could also put a pair on the other side of the opening on the inside or outside as there will still be movement of the gate in that area. Photocells are usually installed on the gate posts/pillars and are placed directly opposite each other as one is a transmitter and one is a receiver. The infrared beam that they produce means that if somebody walks by and breaks it the gates will not operate at all.

Other safety options could be an emergency stop button. This allows anyone in an emergency to stop the gates completely from operating. You could also install resistive/safety edges which ensures a great deal of protection especially suited when young children are about. *'When the safety edge is pressed the two conductive rubber surfaces come together and create a short between them, this cuts the 8.2k Ω signal being monitored by the control electronics'*. So there is little risk of crushing or trapping when safety edges are installed.

