

Site Considerations



Once it has been established that an automated gate or barrier is indeed the best access control solution, thoughts need to turn to reviewing the site and identifying any key safety issues.



LOCATION, LOCATION, LOCATION

When installing a new automated gate it is important to survey the whole site to establish the most suitable location and where appropriate, to mitigate any risks associated with the actual siting of the gate. Factors which must be considered include:



Will the gate be on a flat surface or is there a slope involved? A sloping approach to a gate is likely to result in a reducing gap which could represent a drawing in and crushing risk



If the slope runs out of the site, it is likely that to minimise the change in levels, the gate will open out onto public space. This would represent a potential hazard since pedestrians and drivers do not expect gates to open outwards. Hazard signs, warning lights and even a warning alarm would be appropriate in this setting but any gate opening onto a pavement is unacceptable

Is access to the site directly off a main road? If the road regularly features heavy traffic, there could be a timing issue between the gates opening and closing and the vehicle being stuck in traffic and unable to turn. This could result in further traffic delays as the driver waits for the gates to reopen

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IS THERE EASY ACCESS TO THE ELECTRICAL MAINS SUPPLY?

For example, be aware of the major costs associated with digging up an existing driveway to enable the necessary cabling and ducting to be sited at the suitable depth to deliver adequate protection. Electrical cables must be protected, either via a metal conduit or duct or SWA (steel wire armoured). Generally speaking, the mains supply in should be SWA protected and any cables associated with the access control system should be protected by metal ducts. Cables that are not protected are not UV resistant, can easily get damaged and can short out causing a significant fire / electrocution hazard. The mains supply on an automated gate **MUST** be installed and certified by a suitably qualified professional – electrician must be 18th Edition qualified for gates in an industrial or commercial setting, gate must be compliant with Part P Building Regulations for a domestic application. Whilst solar power represents an environmentally friendly energy source, it is not recommended for automated gates due to the weather conditions in the UK. The essential safety devices associated with any automated gate would need to have a constant and regular power supply.



Are there any height restrictions associated with the site – this would be particularly relevant in an underground car park setting which would likely feature a barrier. In this scenario, there needs to be clearance of the barrier arm without hitting the lintel. An articulated arm barrier may need to be considered for this type of application.

Are there any physical properties which may represent a risk when the gate opens, for example, are there any brick piers which could create a potential crushing scenario when the gate opens. If a brick pier exists it is vital to hang the gate at the corner of the pier to prevent it folding back onto the pier near the hinge area (this is only relevant if the gate can only open to 90 degrees)

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WILL THE GATE BE BLOCKING ANY FIRE EXITS?

Is the size of the gate conducive to allowing emergency vehicles access to the site? It is a legal requirement for all gates to provide 'adequate means of access for the fire brigade to the building'



SEGREGATED ACCESS



Private and housing association owned residential developments often feature automated gates but anyone responsible for installing a gate in this type of location should point out the importance of a separate gate designed specifically for pedestrian access. Gate Safe is aware of scenarios where a mother has opened the main gate, got distracted and the gate closes with a child left on the other side. In addition, moving automated gates represent a potential play opportunity for young children but if they are **ALWAYS** guided towards a separate pedestrian gate, it is easier to drive home the importance of **ONLY** using this method of access / egress to and from the site. Segregated access also allows a speedier evacuation of the property in the event of a fire.



MANUAL RELEASE



Easy access to the manual release key should always be a priority, especially when installing a gate at a multi-occupancy property. Best practice is to install a key safe box so that should an emergency arise, the manual release key can be quickly located. Obviously, the code for the key safe box must be communicated to all relevant site personnel and residents and training must be delivered to ensure that there is a clear understanding as to how to use the manual release key.