GATE SAFE®

Safe School Gates

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INTRODUCING THE

SAFE SCHOOL GATES CAMPAIGN

Gate Safe (www.gate-safe.org) is a registered charity founded in 2010, committed to improving the safety standard for automatic – and manual – gates in the UK.

The charity has undertaken a nationwide survey of school gates which indicates that the very installations intended to improve safety, in an unacceptable number of cases, actually represent a clear danger.

Parents send their children to school in the belief that they are placing them in a safe and secure setting. Having an unsafe gate on the premises represents a danger to pupils, staff and any visitors to the school. It is also a legal requirement – under the Supply of Machinery (Safety) Regulations 2008 - for schools to ensure the safety of any automated gates that feature on the site.

There have already been serious accidents, and indeed a fatality, recorded in a school setting and Gate Safe is also aware of numerous 'near misses'.

Gate Safe's Safe School Gates campaign encourages schools to be more vigilant about automated gate safety and to adopt the recommended protocols that will deliver a safe – and legally compliant – gate BEFORE another accident or worse occurs.

The information contained within this pack provides an overview of some of the key steps that must be taken, further guidance is provided on the Gate Safe website, or you can contact our technical helpline on 01303 840117 or email info@gate-safe.org.

CONSIDERING AN AUTOMATED GATE?

QUESTIONS TO BE ASKED . . .

- Is an automated gate the appropriate solution for the school's needs?
- How often will the gate be used?
- Are there sufficient funds to ensure the essential safety devices are added to the gate / to fund the required regular (six months as a minimum) maintenance?
- How will the gate be operated / how will visitors or staff be able to gain access to pass through the gate?
- Will pedestrians be walking closely to the gate / wanting to gain access in which case has separate pedestrian access been discussed?
- Will the gate be opening towards something that could crush someone?
- Will the gate be on level ground thus avoiding any large gaps underneath?
- What training will the school be given to understand how to use the gate correctly / put it into manual operation if required

ALREADY HAVE AN AUTOMATED GATE AT THE SCHOOL?

QUESTIONS TO ASK YOUR INSTALLER . . .

- Is this gate legally compliant ie in line with **Supply of Machinery (Safety) Regulations 2008**?
- Is there any chance that the gate is at risk of falling due to a component failure?
- What will prevent the gate from opening or closing too far?
- What is going to stop the gate from hitting someone / something?
- What will happen if the gate does hit someone? Will it stop and revert away?
- Will the gate be running past something so a person could be drawn into a gap? For example, if the gate opens parallel to a wall and someone were to be in the gap they could be drawn into the support posts
- Is the gate on level ground to avoid any large gaps underneath?
- Is it possible for someone to reach through a gap in the gate to reach the access control on the other side?
- What happens if the gate breaks down, or if there is an emergency?

SCHOOL GATES:

FACTORS TO BE TAKEN INTO CONSIDERATION

Purpose

Automated gates and barriers can secure school entrances, safeguard staff and students and prevent unauthorised access. However, they require legal compliance, ongoing maintenance and budget beyond initial installation.

Key Decision Factors

1. **Need & Usage**
   Low usage (≤10/week): Consider manual gates.
   Medium usage (≥10/day): Automation justified.
   High usage (≥50/day): Automation recommended for smooth traffic flow.

2. Access Requirements

Pupils: Controlled access with pupils able to enter freely at set times of the day or securely access with swipe card / key fob / key pad. Pedestrian routes must be separate from vehicle gates.

Staff: Authorised access via remote/fob/card/keypad/ANPR. Staff parking should be segregated from visitors

Visitors: Controlled access to site use of intercom to ring the office to be granted access

3. Gate/Barrier Types

Swing Gates – Cheaper, suited for medium use; can be less secure, wind-affected.

Sliding Gates – More secure but need to be used in conjunction with a traffic barrier to ensure control of traffic, space-efficient; robust in wind, options include cantilevered (good for uneven ground) and tracked (needs level ground).

Rising Arm Barriers – Fast for traffic control; can be combined with gates; must have pedestrian segregation.

For effective pedestrian control turnstiles are the best option.

4. Economic Considerations

Don't choose solely on price—specification, design, safety, and corrosion protection matter. Large, heavy, or wind-affected gates may require automation for safety.

5. Access Control

Choose devices for each group (vehicle/pedestrian, authorised/unauthorised).

Position controls at least 1.5m from the gate to prevent injury.

6. Legal Responsibilities

Automated gates are classed as machinery and Installers must risk assess and comply with:

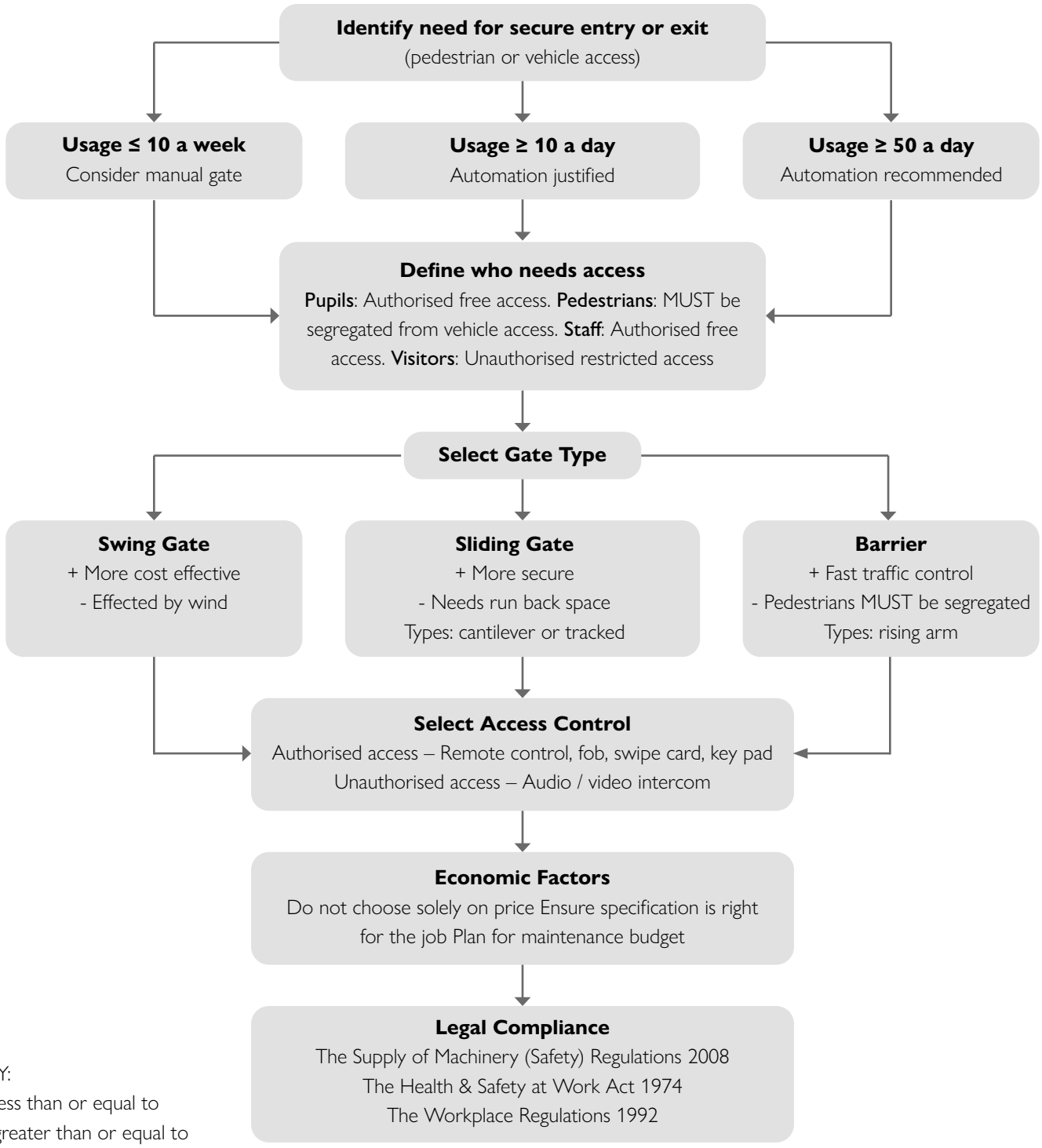
The Supply of Machinery (Safety) Regulations 2008

The Health and Safety at Work Act 1974

The Workplace (Health, Safety and Welfare) Regulations 1992

Owners have a legal duty to ensure safe operation and regular maintenance.

CONSIDERATIONS WHEN PURCHASING SCHOOL GATES



KEY:
≤ less than or equal to
≥ greater than or equal to

MAINTENANCE CHECKLIST

FOR AUTOMATED GATES

- Check any photocells are clear of plant debris or snow as this can block the beam and prevent the gate from operating
- Check for wear and tear around the posts / supports and the overall construction of the gate / barrier. Make sure the gate is operating smoothly
- Check the manual release procedure and ease of manual operation. Ensure staff continue to be aware of the procedure in the event of the gate breaking down and understand how to place it in manual operation to enable safe access and exit. If in doubt ask your maintenance company to demonstrate this for you on the next service maintenance visit
- Ensure the track and opening area of the gate is free of debris
- Consider any changes around the gate / barrier that could affect the safety and running of the gate i.e. new bin store being installed near the gate

If you are unsure about any of the above, we strongly advise you to ensure your gate is checked by a Gate Safe installer.

MANUAL GATE GUIDANCE

There have been a number of accidents recorded in schools which relate to manual gates and if these installations are not routinely risk assessed, the school could be held liable in the event of an incident. If the decision is taken to install a manual gate, care must still be taken to mitigate against any potential safety hazards.

Key points to remember when installing a manual gate:

- Finger guards should be placed over gate hinges to avoid fingers becoming trapped and a soft close feature should also be in operation to prevent further slamming or trapping of fingers
- Hinges should feature tamperproof screws and bolts
- All gates must deliver a clearance of between 60 – 100 mm to allow for the slope of the path / camber of the road
- There should be a minimum of 12 mm between the gate and the gate post, to eliminate a shear risk
- All gates should be presented in a different colour to help children / parents avoid any fear associated with not being able to identify an exit quickly
- The failure of one component should not allow the gate to fall

In terms of maintenance, manual gates should be regularly inspected, checking for wear and tear around the posts/supports and the fabric of the gate and reviewing the overall ease of operation.

ABC OF AUTOMATED GATES

A

Automated gate – a gate which opens and closes automatically, rather than manually. Powered by electricity

Anti finger trap – a device used to mitigate the risk of a person / child trapping their finger between the gate post and the gate hinge. These are sometimes also referred to as finger guards

Access control - the systems and processes that restrict access to physical locations, to ensure that only authorized personnel can enter

Audio intercom – electronic device that sends and receives audio signals, enabling a person to speak into a microphone before being permitted entry via the gates

B

Barrier – a barrier may be used instead of a gate in areas where there is no required pedestrian access to control vehicle entry into and out of various settings such as schools, car parks etc

Bi-fold gate - a type of swing gate ideal for a restricted space as they effectively half the arc of the movement of the gate. However, there is the potential for the gate to open and close at a greater speed than a traditional swing gate which can pose a risk and the need for an increased amount of safety devices compared to a standard swing gate

C

Control cabinet – this is where the control board and electrical equipment associated with an automated gate is stored. Control cabinets should be waterproof and able to sustain harsh weather conditions

Contact safety – a safety device which is activated when the gate touches a person / object, causing the gate to halt and reverse

Cranked arm operator – a type of swing gate motor which has a folding arm mechanism

D

Drive unit – this is also called a ram / motor and represents the power source to open and close the gate

Double leaf gate – two gate leaves / halves which are the moveable parts of the gate that swing or slide open and closed

E

End stops – these are a physical devices fitted to a gate to prevent the gate from over travel which can result in the gate falling. End stops can also be an electronic device which signals the gate automation to stop

F

Force testing – force testing is used to identify the current force being used to operate a gate or barrier. It can be used to correctly identify the appropriate type and size of safety device to prevent the risk of impact and crushing

Flag – a limit switch activator placed onto a sliding gate leaf that makes contact or is in close proximity to a limit switch on the drive motor

G

Gate tether – a safety cable that is attached to a swing gate to prevent the gate falling in the event of a hinge failure

Gate installer – a professional who specialises in the installation, repair and maintenance of automated and / or manual gates

Ground loop – induction cable which is laid beneath the driveway surface which detects the presence of vehicles / metal and sends a message to the control panel via a ground loop detector to open / close the gates

Gate leaf / leaves – the moving panel (s) or section of a gate that either swings or slides open and closed

H

Hinge – hinges are used to support a gate on a gate post and enable the gate to open and close

Health & Safety at Work Act 1974 – legislation that details the legal requirements for workplace, health and safety. Applicable if the automated gates are sited in what can be classed as a commercial setting

I

IP Rating – this is also termed as Ingress Protection and refers to the level of sealing effectiveness ie protection of the control cabinet housing the control board and electrical equipment

J

Jack – an "old school" term for a hydraulic operator

K

Key pad – access control system which requires the user to enter specific code on a key pad to activate the opening of the gate

L

Leading edge – this is the edge of the gate furthest from the hinge or support post

Laser scanner – an electronic non-contact safety device which uses invisible laser beams to detect a person or an object entering the field in which the gate opens and closes

Light curtain – an electronic non-contact safety device which employs multiple strips of photocells

Limit switch – a physical mechanical switch fitted to a gate to prevent the gate opening or closing too far. The limit switch defines the fully open and closed positions of the gate / barrier. It stops the motor when the gate reaches its fully open or closed position

Logic board – the "brain" of the system that interfaces the access control and safety devices and which is responsible for making the motor run

M

Maglock – a magnetic lock to deliver additional security

Mounting post – post used to mount intercoms or key pads

Manual release key – key which enables the disengagement of the gate's motor and allow the gate to be moved manually. Used in the event of a power outage, system malfunction or accident

Maintenance – the regular upkeep and inspection of gates to ensure they are functioning correctly and safely. NB must be carried out by a professional. There is a legal requirement for school gates to be maintained

N

Non-contact safety – a safety device which prevents a gate touching a person / object, halting / halt and reverse the gate when it detects a person or object – represents the first line of defence in terms of safety of an automated gate

O

Operator – the gate motor / ram. Can also refer to the Gate House Operator ie the person manning a gate house who screens visitors to the site before activating the gate or barrier to enable entry

P

Pales – upright infills on the gate to provide structure / aesthetic appeal

Pedestrian guard rail – a type of fencing which prevents pedestrian access to an automatic gate, also known as guard rail / ped guard rail

Photocells – also known as Magic Eyes, Beams, Infra-red sensors, photo electric sensors. A type of non-contact safety which provides a beam of light across the entrance of a gate, when the beam is broken the gate will stop, or stop and reverse

Pressure edges – also known as safety edges, contact edges, bump strips, pressure sensitive edges. A type of contact safety which is used to prevent potential crushing, impact, entrapment or shearing on electric gates and barriers. If the gate touches a person / object the pressure edge safety device will activate a message to halt and reverse the gate, or halt the gate

Push button – access control which allows free entry or egress from a site. Generally only used as a free exit device for security purposes

Proximity tag – Type of access control device that allows authorised access to site by use of a small tag or fob, which when held near a reader will grant access and triggers the operation of the gate

Q

R

Ram operator – the operator or motor attached to the face of the gate to open or close it

Remote – hand held device used to activate the gate. Also known as zappers, fobs, radio remote control

Radar scanner – non contact safety device that can be used on barriers

Risk assessment – assessment which should always be carried out prior to the installation of an automated gate

S

Safety edge – see pressure edge above
Safety beams – see photocells above
Shrouds – metal or plastic covering to provide added protection to prevent the risk of entrapment
SMSR 08 – Supply of Machinery (Safety) Regulations 2008, defines the legal requirements to ensure the safety of all automated gates
Single leaf gate – a single moveable part of a gate that swings or slide open and closed
Single point failure - a component within a (gate) system whose failure could result in the entire system breaking down, eg the gate falling
Swipe card – plastic card that features a magnetic strip containing an authorised code which will enable the user to open / close the gate, when contact is made with the card reader

T

Tracked sliding gate – a sliding gate that uses a track set into the ground to move the gate (either a single or double leaf gate)
Telescopic sliding gate - a sliding gate consisting of two parallel leaves linked together, requiring a smaller run back area.

U

Underground operator – a type of operator located underground to open a swing gate
UPS – stands for Uninterrupted Power Supply, this will enable an automated gate to operate during a power failure

V

Vehicle gate – a gate which is only used for vehicle – not pedestrian – access
Video intercom – electronic device at the gate entrance which is used to manage access control via video footage of the visitor prior to permitting entry via the gates

W

WHSWR – Workplace (Health, Safety & Welfare) Regulations 1992 – legislation defining the health, safety and welfare requirements for a place of work, includes schools
Warning signs – signs which are positioned on or near an automated gate to alert pedestrians / vehicles that the gate will open and close automatically Gate Safe does not recommend beacons or flashing lights in a school setting
Wire mesh – wire mesh can be used to reduce the risk of crushing on an automated gate, creating a barrier and enclosure around potential hazards, such as the gate's moving parts or areas where a person could be trapped

X

Y

Yellow hatching – visible signage (criss-crossed yellow) to alert road users / pedestrians of the need to keep an area clear at all times to maintain traffic flow

Z

Zzz. – The ability to sleep at night knowing you have a safe gate, installed and maintained by an expert