



FACT SHEET.

ENSURING SAFETY AND LONGEVITY FOR AUTOMATIC GATES THROUGH MAINTENANCE

Automatic gates play a crucial role in maintaining security and facilitating convenience in commercial settings by regulating access for pedestrians and vehicles. However, in fulfilling this function, it's essential that these gates prioritise safety above all else.

Under State Government Legislation, automatic gates and barriers are classed as machines. All machinery in a commercial setting must be regularly maintained. The details of how often maintenance is required is different for each system depending on: manufacturers requirements, frequency of use, and the type of machinery installed. The code of practice - "managing the risks of plant in the workplace" - stipulate maintenance as part of the legal duty of care.

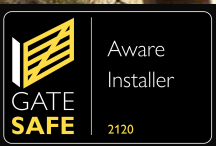
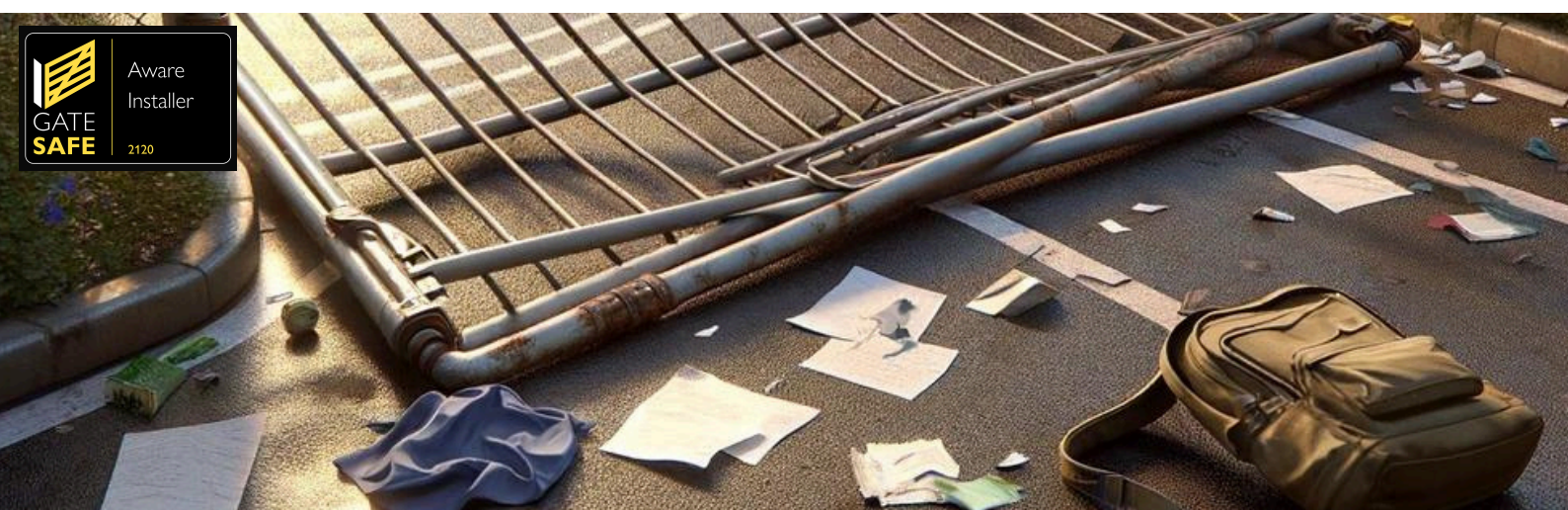
Failure to follow or consider the code may result in a finding that an employer has breached their work health and safety duties, meaning they may be liable for any/all incidents related to that gate.

Detailed over, are the safety and operational risks associated with automatic gates, what can happen in failure, and the best practice methods for ensuring safety and longevity in operation.

Risk Associated With Automatic Gates

There are a number of risks associated with the operation of Automatic Gates. Below are listed some of the main risks that need to be considered, and controlled effectively to be deemed a SAFE automatic gate.

- 1. Impact:** Automatic gates can cause injury if or damage to property if they open suddenly and without warning, posing a risk to pedestrians, vehicles, or objects in their path.
- 2. Shearing:** Moving parts of gates can exert shearing forces, potentially leading to serious injuries or death if body parts or objects become trapped within a moving gate.
- 3. Crushing:** The significant force exerted by closing gates can crush individuals or objects trapped between the gate and its frame or the ground.
- 4. Dragging/drawing into the gate:** Loose clothing or body parts may get caught in moving parts, dragging individuals into harm's way during gate operation.
- 5. Cutting action:** Gates with sharp edges or protruding components can cause cutting injuries if people come into contact with them.
- 6. Hooking:** Protruding gate components can hook onto objects or clothing, leading to injuries or entanglement.
- 7. Mechanical failure:** Poorly maintained or defective gate components can cause the gate to fall or derail, risking injury or property damage.
- 8. Entrapment:** Gates in operation can create enclosed spaces, trapping individuals inside without a safe means of exit.
- 9. Electrical hazards:** Electrically powered gates can pose fire or electrocution risks if components malfunction or safety measures are inadequate.



How to safely control and mitigate these risks

- 1. Design:** Every Gate should start safe. The ability to design out risks is the greatest step towards a SAFE Automatic and Manual gate. There are a variety of elements to consider, therefore only a reputable and professional commercial gate manufacturer should be used, and in combination with engineers for static and dynamic loads for self supporting structures. Some examples are: Physical Stops, catcher brackets and ensuring no single point failure EG: Failure of one component should not lead to a catastrophic failure of the gate. I.e: if a hinge breaks, then the gate should not fall or be able to cause injury.
- 2. Operational Requirements:** The operation of the gate as a part of the site security system should be considered. A gate should not be allowed to operate in a unsafe manner (bypass safety devices or automatic open without safety). The training of the users of the site, as well as the level of security needs to be considered at this step.
- 3. Safety device Selection.** The selection of the safety device should consider points 1 and 2 before selection. All gates (with the exception of maximum high security applications) should be fitted with at least 1 non contact safety device and 1 contact safety device. Example: Photo electric beams (non contact) and Operator Obstacle Detection (contact). There are a variety of differing devices to consider, as well as appropriate protection for both sides of the gate in both opening and closing cycles.
- 4. Risk Assessment:** Every Gate should have a site specific risk assessment carried out and should consider all of the above in operation. The assessment should be carried out by a professional in the field of gates and automation, preferably with a third party certificate.
- 5. Maintenance and Inspection:** Recurring maintenance, testing of assets and certification per manufacturers recommendation / every 6 months for safety should be undertaken.



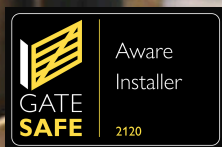
Why Planned Regular Maintenance

1. The legal requirements and duty of care to provide SAFE plant and machinery to workers and users of the gate. The untrained user and general public who needs to pass through these gateways, are placing trust that the site is safe and they are able to freely pass without risk of injury or damage to property.

2. Safety device compliance. The testing of photo safety beams, warning lights, signage, pre warning alarms, contact safety edges are required to be re-certified every 6 months per manufacturers recommendations.

3. Preventing catastrophic failure to the structure resulting in injury, death and damage to property. High speed, heavy automatic gates have resulted in too many injuries and deaths globally, including Australia. If rollers, tracks wheels, safety devices, catches and stops are not correctly tightened, lubricated inspected and replaced when necessary – every automatic gate is on a countdown timer to structural failure. In almost all instances of serious injury to people involving automatic gates, a lack of maintenance of critical safety elements has been a contributing factor.

4. Longevity of the system. Just like a car, Gates need their parts inspected and consumables replaced to ensure they are operating exactly as they should and without significant wear and tear.



Best Practice Maintenance

Automatic Gates are subject to significant environmental influence everyday – Wind, heat, ground movement, vermin infestation, dynamic movement of the gate as well as debris, dirt, sand and grit build up just to name a few. Automatic gates are predominately used by untrained users everyday, often with intensive duty cycles. They maintain site security, prevent unauthorized access and egress to sites, and are often integrated into larger security systems and need to be working to ensure that general operation of workplaces and public facilities are able to perform correctly.

Ideal Fencing and Gates offers planned routine maintenance to all customers that we have completed installations for. During the maintenance visit we will undertake the following:

- Full check on gate/barrier operation + balancing
- Visual inspection of all gate/barrier components
- Readjustment + resetting of hardware components as required
- Readjustment + checking of electrical operation (where applicable)
- Check all electrical safety equipment and its operation (where applicable)
- Supply and fix a service sticker to give a clear indication that the gate/barrier is
- Regularly serviced and safe for continued use
- Asset report of findings, test results and required upgraded replacement parts.



Should you require any planned maintenance of your automatic gate. Please get in touch.

