BE SAFE

Automated vehicular gate systems provide user convenience and security. However, because these machines can produce high levels of force, it is imperative that you understand how proper site design, installation and maintenance reduce potential hazards associated with gates and automatic gate operators. This brochure highlights industry safety standards and identifies entrapment protection devices that need to be in place to avoid serious injury or death. Before the installer leaves the site, take a few minutes to inspect and test your gate system.

- Make sure your gate operator is grounded.
- Ask the installer where the Emergency Stop Switch is located and cycle the gate once or twice to test it.
- Learn how to turn power ON and OFF and manually open and close the gate.
- Inspect the entrapment protection devices. Ask your installer to perform tests and show you that they are working properly.

A MOVING GATE CAN CAUSE SERIOUS INJURY OR DEATH!

It is the owner’s and user’s responsibility to be aware of potential hazards associated with an automated vehicular gate system and take appropriate steps to reduce the risk of injury.

Be sure to read the Important Safety Information found in your gate operator’s manual as it provides more details and safety considerations than can be supplied in this brochure.

NOTE: The design and construction of automated gates for vehicular traffic must comply with certain safety standards and local codes. The illustrations and callouts in this brochure show the basics for gate system compliance. For reference, UL 325 and ASTM F2200 requirements are called out where applicable.

MORE INFORMATION
WEBSITES:
DASMA: www.dasma.com
Underwriters Laboratories: www.ul.com
Automated Vehicular Gate Standards, ASTM F2200: www.astm.org

Disclaimer: This brochure cannot cover all possible site situations or compliance issues. Be sure to read your gate operator’s manual, follow manufacturer’s requirements, and consult with your qualified installer for additional information.

© 2015 DASMA
November 24, 2015

Gate System Safety
An Automatic Decision

NOTICE: Beginning January 2016, all external entrapment protection devices must be monitored for presence and correct operation. If a fault occurs, the gate operator will not function unless a continuous pressure activation device is being used.

This brochure accompanies your Automated Vehicular Gate System and provides an overview of safety and general design considerations that should be implemented at your site.

Its purpose is to provide guidance and help familiarize you with gate and gate operator safety standards and requirements.

Review this brochure carefully and keep it for reference. If you have any questions, talk to your qualified installer.
Swing Gate Requirements

Only install the operator on gates used for vehicular traffic. Be sure to direct pedestrians to a separate entry and exit. Refer to the illustrations. The gate site must be designed so persons do not come in contact with the vehicular gate while it is moving. Signs must be posted to warn pedestrians to stay clear of the gate’s entire travel path. A separate pedestrian entry/exit must be clearly visible and promote pedestrian usage.

Public Side

- Mount access control devices at least 6 ft (1.8 m) beyond the gate.
- Make sure a separate walk-through entrance is available and its pedestrian path is clearly designated.
- Pedestrian gate located near the swing gate.

Secure Side

- Mount access control devices at least 6 ft (1.8 m) beyond the gate.
- Photo eye (public side)
- Edgesensor
- Earth ground

Hinge Mount Location: Entrapment Considerations

1. Closed Gate
   - If space is greater than 4 inches (10 cm), entrapment protection in this area is required.
   - If space is less than 4 inches (10 cm), entrapment protection in this area is required.
   (ASTM F2200: 7.1.1.1 and 7.1.1.2)

2. Closed Gate
   - With the hinge mounted on the corner of the pilaster, the entrapment zone is eliminated and protection is not required for this area.

Slide Gate Requirements

Only install the operator on gates used for vehicular traffic. Be sure to direct pedestrians to a separate entry and exit. Refer to the illustrations. The gate site must be designed so persons do not come in contact with the vehicular gate while it is moving. Signs must be posted to warn pedestrians to stay clear of the gate’s entire travel path. A separate pedestrian entry/exit must be clearly visible and promote pedestrian usage.

Public Side

- Be sure to place the WARNING signs on both sides of the gate in clear view for your records, take a photograph of the completed installation site.
- Pedestrian gate located near the slide gate.

Secure Side

- Mount access control devices at least 6 ft (1.8 m) beyond the gate.
- Photo eye (public side)
- Photo eye (Emitter or Reflector in the close direction)
- V track (gate rail)

Base of Swing & Slide Gates

Gates must have smooth bottom edges, no protrusions should exist. If gate hardware or sensors protrude, they must have smooth surfaces free of any sharp cutting edges that do not exceed ½ inch (13 mm) beyond the base of the gate.

Screened Wire Mesh

In the illustration below, the gap between vertical bars is non-compliant. It poses a safety hazard if it is wider than 2¼ inches (57 mm). A screened wire mesh has been added to comply with ASTM F2200 gate standards.

Compliant openings

Gap (xxxx) between vertical bars must be less than 2¼ inches (57 mm) up to a height of 6 ft (1.8 m) above ground.

All openings of a horizontal slide gate are guarded or screened from the bottom of the gate to a minimum of 6 ft (1.8 m) above the ground to prevent a 2¼ inch (57 mm) diameter sphere from passing through the openings anywhere in the gate and in that portion of the adjacent fence that the gate covers in the open position.