# AUTOMATED VEHICULAR GATE SYSTEM S A F E T Y • G U I D E Gate System Safety – An Automatic Decision

Automated gate systems provide convenience and security. However, gate openers must use high levels of force to move gates. If a system is not properly designed, installed, used and maintained, serious injuries including death can result.

- This guide provides important highlights of two safety standards related to automatically operated gate systems. Read it and keep it for reference. Be certain this information is reviewed by those authorized to use your gate.
- The industry has endorsed two voluntary safety standards related to automatically operated gate systems. UL325 addresses the manufacturing and installation of gate openers and ASTM F2200 addresses the design and construction of gates for vehicular traffic that are to be automated.
- Owners and users must be aware of the possible hazards associated with an automatic gate system and take care to reduce the risk of injury. Be certain that the designer and qualified installer of your gate system understands and applies the UL325 and ASTM F2200 standards as they relate to your unique gate system. Copies of these standards can be obtained by contacting the relevant organizations listed on the back of this brochure.
- This brochure cannot cover all possible situations because each system is designed for a specific location or use, and has a unique set of components. Refer to your gate opener's manual and consult with the installer for additional information.
- Take a few minutes to inspect and test your gate system. Make monthly inspection and testing a part of your regular routine. Safety is everyone's business. Make gate opener safety automatic in your home.



# Safety Information

#### A MOVING GATE CAN CAUSE SERIOUS INJURY OR DEATH!



- Your vehicular gate is not intended for pedestrian use. A separate pedestrian gate is required if pedestrian traffic is expected.
- Clearly display **WARNING SIGNS** on both sides of your gate.



KEEP CLEAR OF THE GATE AREA AT ALL TIMES! People must be warned to stay away from all moving parts, entrapment zones and hazard or pinch points.



If your gate has open rollers, be sure roller guards have been installed.



Never try to operate the gate by reaching between, through, over or around the fence or gate.



Make certain that all access control devices (push buttons, key switches, card readers, etc.) are mounted at least six feet (6') away from any moving part of the gate, or where they cannot be accessed by reaching through the gate.



Do not permit children to play on or around a gate, and keep all controls out of their reach.



Automatic gate openers are designed for vehicular traffic. They are powerful and can cause serious bodily injury or death. Accordingly, direct all pedestrian traffic to a separate walk-through gate.

# **Manual Operation**

Your gate opener is equipped with a means for manually operating the gate. You must understand how to manually operate the gate safely. Turn off all electrical power before disconnecting the opener. Consult the manufacturer's instructions shipped with the equipment.

#### UL325 Safety Requirements UL325 compliant installations require the use

UL325 compliant installations require the use of multiple entrapment protection devices that are effective while the gate is both opening and closing.

Talk to your qualified installer about the entrapment protection devices recommended for your system.

Some examples of these devices are:

- Gate sensing edges
- Photoelectric sensors
- Audio/visual moving gate alarms

# ASTM F2200 Requirements

ASTM F2200 standards require that automated gates must have the following, where applicable:

- Covers for all exposed rollers
- Protective screen mesh
- Guard posts
- Slide gates and the adjacent fence must not allow a 2 1/4" sphere to pass through up 48" from the ground.
- Gates must be prevented from falling over if disconnected from the gate opener.
- Swing gates with potential entrapment zones of greater than 4" to less than 16" must be protected.
- Swing gates must not have any protrusions on the bottom of the gate.

Refer to ASTM F2200 for complete information.

### Installation and Maintenance Only purchase and install openers which are listed and meet the UL325 Standard.

**Special Precautions for Slide Gate Systems REFER TO ASTM F2200** 

Make sure your gate system is installed and maintained according to the manufacturer's installation instructions. Follow UL325, ASTM F2200 and the manufacturer's recommended maintenance schedule. Ask the gualified installer about a service agreement.

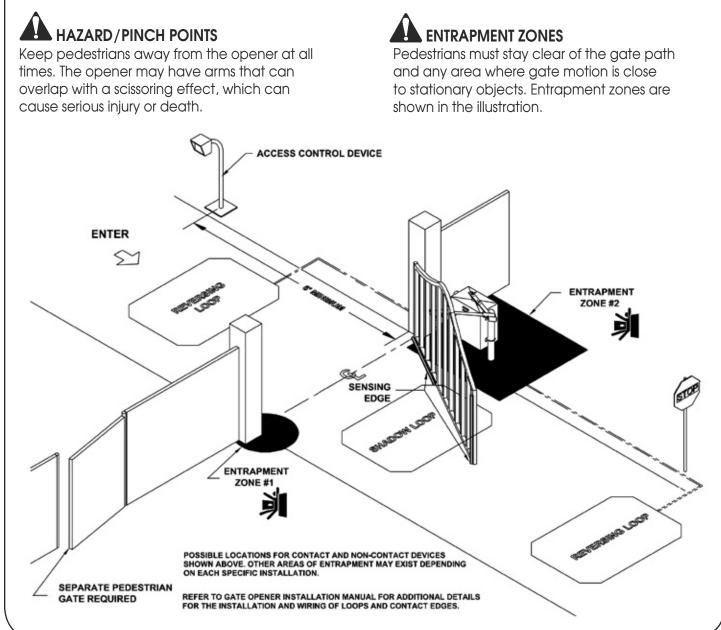
Do not operate your gate system unless all of your entrapment protection devices are connected and working properly.

Check all of your entrapment protection devices reaularly in accordance with the opener manual. If any of the entrapment protection devices do not operate, disconnect all power to the opener and have the system repaired by a qualified installer.

Make sure the gate opens and closes smoothly without the automatic opener. To check this, disconnect gate from the opener and move the gate by hand.

#### ENTRAPMENT ZONES PINCH HAZARD – OPEN ROLLER GATES Serious injuries occur when people get their hands Pedestrians must stay clear of the gate path and any area where gate motion is close caught in any exposed roller. Roller guards or covers must be installed on all exposed rollers! to stationary objects. Entrapment zones are shown in the illustration. PICKETS SPACED MESH WITH OPENINGS SMALLER THAN 2 1/4" CLOSER THAN Pinch 2 1/4" Points TO A MINIMUM HEIGHT OF 48" ABOVE GROUND OVER ENTIRE GATE OR ENGTH rollers protected always cover with cover guards open rollers S ACCESS CONTROL DEVICE 51 HOTOEYE BEHIND GATE ENTRAPMENT 训 SENSING EDGES SHOWN ON LEADING AND TRAILING EDGES OF GATE, AND ON POSTS REVERSING PHOTOEYE ENTRAPMENT POSSIBLE LOCATIONS FOR CONTACT AND NON-CONTACT DEVICES SHOWN ABOVE OTHER AREAS OF ENTRAPMENT MAY EXIST DEPENDING ON EACH SPECIFIC INSTALLATION REFER TO GATE OPENER INSTALLATION MANUAL FOR ADDITIONAL DETAILS FOR THE INSTALLATION AND WIRING OF LOOPS, EDGES, AND PHOTOEYES. SEPARATE PEDESTRIAN GATE REQUIRED

## **Special Precautions for Swing Gate Systems REFER TO ASTM F2200**





**UL325 Underwriters Laboratory:** http://ulstandardsinfonet.ul.com ASTM F2200: www.astm.org

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