

IMPORTANT SAFETY INSTRUCTIONS

Hazards, associated with automatic gates, can be reduced with proper site design, installation, and use. Installers, maintenance crews, and owners/users must read and follow the safety requirements found in the HySecurity® product manuals.

It is important that only qualified installers handle the installation of the HySecurity equipment. A “qualified” installer has one of the following:

- A minimum of three years experience installing similar equipment
- Proof of attending a HySecurity Technical Training seminar within the past three years
- Significant manufacturer endorsements of technical aptitude in gate operator installation and operation

Underwriter Laboratories (UL) and the American Society for Testing and Materials (ASTM) are responsible for current safety standards and regulations regarding automatic vehicular gate operators. To pass certification, all aspects of barrier arm or gate installation must comply with the appropriate safety standards.

For the most up-to-date ASTM F2200 Gate and Fence Standards, refer to www.astm.org. For UL 325 Safety Standard, refer to www.ul.com.

WARNING:

A moving gate or barrier arm can cause serious injury or death. To reduce the risk of injury or death:

1. **READ AND FOLLOW ALL INSTRUCTIONS.** Read the gate operator's product manual and review all the product labels and literature prior to installing, operating, or maintaining the automatic gate operator.
2. Never let children operate or play with gate controls. Keep all remote controls, especially radio transmitters, away from children. Do not allow children to play on or around the gate or gate operators.
3. Always keep people and objects away from the gate. **NO ONE SHOULD CROSS THE PATH OF THE MOVING GATE.** Start the gate operator only when a gate's travel path is clear.
4. Test the gate operator monthly. The gate **MUST** reverse on contact with a rigid object or stop when an object activates the non-contact sensors. After adjusting the force or the limit of travel, retest the gate operator. Perform routine tests of the entrapment protection sensors, such as photo eyes and gate edges. Failure to adjust and retest the gate operator properly can increase the risk of injury or death.
5. **KEEP GATES PROPERLY MAINTAINED.** Read the product manuals. Have a qualified service person make repairs to gate hardware. Replace batteries in accessory or entrapment sensory devices.
6. Use the emergency release only when the gate is not moving.
7. The automated gate entry is for vehicle use only. Pedestrians must use a separate entrance. Make sure a separate walk-through entrance is nearby. Make certain a clear pedestrian path is designated and signs direct pedestrians to the walk-through gate.
8. Install the supplied WARNING signs on the inside and outside of the gate or barrier arm operator so they are clearly visible from both the secure and public sides. Installing the signs is a requirement for UL 325 compliance.

OTHER SAFETY REQUIREMENTS INCLUDE:

- Verify the gate operator usage class for the site. For all gate operators other than Crash-rated, refer to Identifying Gate Operator Category and Usage Class in the product manual. Install the operator only when the gate operator class is correct for the site, size, and type of gate.
- The gate operator must be properly grounded and the incoming power voltage must match the voltage label on the junction box.
- Install an automatic operator only on gates that comply with ASTM F2200 Gate and Fence Standards. Screen or enclose openings in the gate per UL 325 Safety Standards which include:
 - All horizontal slide gates must guard or screen openings from the gate's base support to a minimum height of 6 feet (183 cm) above the ground. This must prevent a sphere of 2¼-inches (57 mm) in diameter from passing through an opening in the gate or the adjacent fence that is covered in the gate's open position.
 - Physical stops must exist in the gate construction to prevent over-travel in both directions and, for slide gates, guard posts must be installed to prevent the gate from falling in the event of a roller failure.
- Before attaching the operator to the gate, move the gate or barrier arm in both directions. Make sure it is level and travels freely. A gate or barrier arm that moves easily reduces strain on operator components. Gravity should play no part in the opening or closing of the gate.
- Never over-tighten a clutch or pressure relief valve to compensate for a stiff or damaged gate.
- Make sure all exposed pinch points, rollers and wheels are guarded.

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SAFETY REQUIREMENTS, CONTINUED:

- Install the gate operator on the secure (non-public) side of the gate. Note that swing gates cannot open into public areas.
 - Reduce the risk of entrapment throughout the entire travel path by making sure the gate is installed in a location which ensures the required clearance between the gate and adjacent structures when opening or closing. On slide gates, minimize the parallel gap between the gate and the fence.
 - Install enough external entrapment protection sensors so pedestrians are protected from entrapment in both directions of gate travel and all hazard areas are fully protected. On hydraulic gates, set the pressure relief valve at the lowest allowable setting that will reliably operate the gate. The pressure relief valve controls the applied force of the operator and the sensitivity of the inherent entrapment sensor (IES). Note that no IES exists in the barrier arm operators.
 - Never disable the Warn Before Operate buzzer. This buzzer provides an alert that the gate is about to move.
 - Mount access control devices beyond reach of the gate. The control devices that operate the gate must:
 - Be located in a clear line of sight to the gate. Locate controls (Open, Close, Stop/Reset) where a user will have a clear view of the gate.
 - Be mounted beyond 6 feet (183 cm) of the gate, to prevent users from touching or accessing the gate while operating the controls.
 - People attempting to access the controls by reaching through or around the gate can be seriously injured or killed by the moving gate.
 - Incorporate a security feature to prevent unauthorized use.
 - Connect radio and other remote access (non-resetting controls) to the RADIO OPTIONS terminal.
 - Open and close the gate to confirm that it was properly installed and to ensure reduced risk of entrapment. Verify the clearance between the gate and adjacent structures per UL 325 Safety Standards. Have a qualified technician test the gate monthly.
 - When you complete the installation, show the end-user how to:
 - Remove the operator cover, and then turn the power on and off.
 - Manually release the gate. (Use the manual emergency release only when the gate is NOT moving.)
 - Use the Emergency Stop Button. (If an emergency stop button is not available, show the user where the Stop button is located on the gate operator.)
- NOTE: Gate operator instructions must be given to the owner per UL 325 Safety Standards.
- Take photographs of the completed installation site and save it in your business files.

CRASH-RATED GATE OPERATORS

By their very design, fortified crash barriers, drop arm barriers, and wedge-type operators are built to deter terrorism threats and to impede the flow of traffic, stop aggressors, and protect critical infrastructure assets. Though design consideration is given to protect against accidental entrapment or injury to personnel and pedestrians, there is nothing “safe” about the objective of the StrongArm Fortified Crash Barrier Arms. The equipment is constructed to protect against a Design Basis Threat (DBT) and as such, the StrongArm Fortified Crash Barrier Arms can seriously injure or kill if used or installed incorrectly.

Risk Assessment and Site Preparation

Identifying vulnerable areas and securing them is critical to staving off vehicular attacks. Purposeful site planning plays a major role in addressing vehicular approach patterns necessary to limit speed. Employ the services of a traffic engineer to develop a site that will reduce the speed of any approaching vehicle to a maximum of 20 mph (32 km/h) or less. This serves to ensure the stopping effectiveness of the barrier while serving to prevent serious injury to innocent persons who may accidentally contact the barrier.

The best access control and security measures employ bollards, barrier arms, slide gates or Fortified Crash Barrier Arms operating in sequence in site situations involving unique traffic flow, building placement, special security issues, or blast mitigation. An entrance that employs a pair of HySecurity operators properly sequenced, such as a StrongArm M30 Fortified Crash Barrier Arm and SlideDriver™ guarantees that only one vehicle can enter it at a time. Having interlocked or sequenced gates greatly reduces the risk of an unintentional crash and serious injury or death. All HySecurity operators can be easily sequenced because of their inherent interlocking software protocols which integrate seamlessly with RS-485 communication protocols.