

CRASH NP

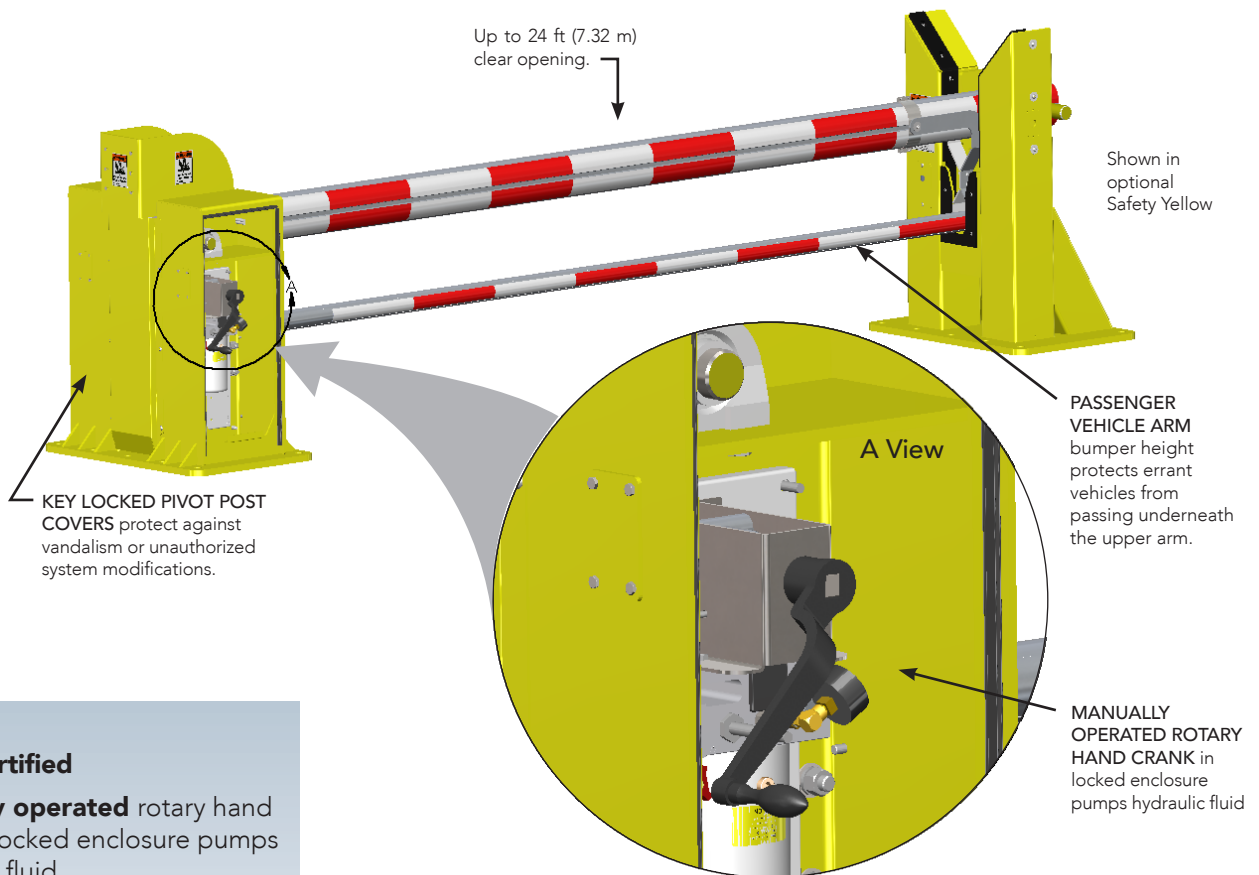
StrongArm CRASH

Patent Pending

Manually Operated Crash Barrier Arm Operator

Manually Operated StrongArm™ M30 & M50

Confidently install the StrongArm M30 NP and StrongArm M50 NP manually operated (no power) models in low cycle sites with no electrical power.



- **Crash certified**
- **Manually operated** rotary hand crank in locked enclosure pumps hydraulic fluid
- **Unique dual arm design** prevents a large truck or a small passenger vehicle from breaching the security perimeter
- **Save time, ensure accuracy** with foundation templates (provided)
- **Retro-fit motorized option** if you choose to add power later

TYPICAL SITES

Military, Embassy, Airport, Corrections, Petrochemical, Hydroelectric, Port, Law Enforcement, Nuclear Power

Same manual components for M30 & M50. Manually operated StrongArm M50 shown

Visit www.hysecurity.com

For specifications, tech support, pictures and email subscriptions

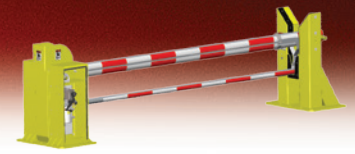
HySecurity®

Simple. Reliable. Secure.®

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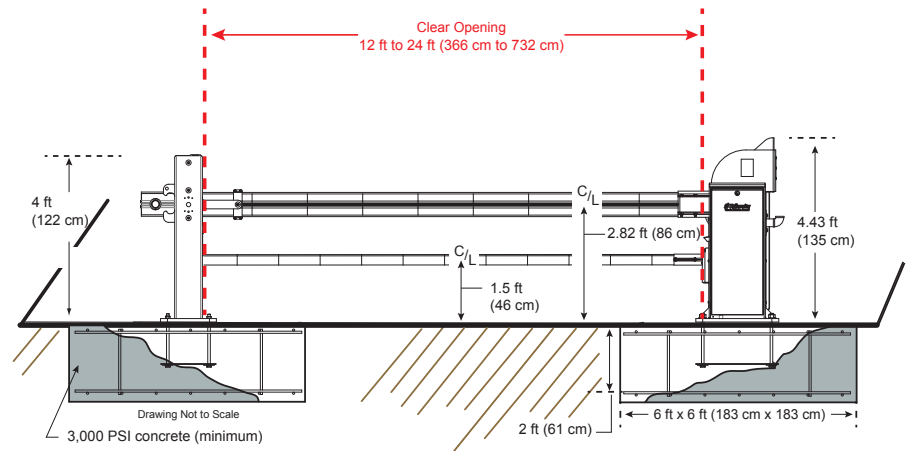
Ultra Reliable High Security

Distributed by:



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Crash certified **StrongArm M30** and **M50** barrier arm provide ultimate hardened security with unmatched user safety for the demanding reliability requirements of industrial, government and military users. HySecurity's unique dual arm design prevents a truck or small passenger vehicle from penetrating a secure perimeter.



StrongArm Manually Operated M30 operator, barrier arm, and foundation dimensions

StrongArm™ Manually Operated M30 and M50

Model	StrongArm M30 NP	StrongArm M50 NP
Crash Certified	ASTM F2656-07 M30-P1*	ASTM F2656-07 M50-P2*
Duty Cycle	Manually operated	Manually operated
Open/Close Time	Open time: approx. 60 to 120 seconds depending on arm Close time: approx. 15 to 25 seconds depending on arm	Open time: approx. 60 to 120 seconds depending on arm Close time: approx. 15 to 25 seconds depending on arm
Clear Opening	12 to 24 ft in 2 ft increments (366 to 732 cm in 61 cm increments) Call for custom arm length	12 to 24 ft in 2 ft increments (366 to 732 cm in 61 cm increments) Call for custom arm length
Full Open Angle	Adjustable 90° ± 10°	Adjustable 90° ± 10°
Ingress Protection	IP56	IP56
Temperature Rating	-40° to 158° F (-40° to 70° C) or -10° to 158° F (-23° to 70° C) using biodegradeable fluid.	-40° to 158° F (-40° to 70° C) or -10° to 158° F (-23° to 70° C) using biodegradeable fluid.
Finish Type	Hot dipped galvanized standard. Optional textured yellow powder coat over zinc plating.	Hot dipped galvanized standard. Optional textured yellow powder coat over zinc plating.
Foundation	6 x 6 x 2 ft (183 x 183 x 61 cm) or 4 ft ³ (122 cm ³) 3,000 psi concrete, #5 rebar, grade 60	6 x 6 x 4 ft (183 x 183 x 122 cm) 4,000 psi concrete, #6 rebar, grade 60
Warranty	5 year	5 year

*Contact HySecurity to receive a copy of the ASTM F2656-07 M30/M50 Test Certifications. StrongArm M50 received a P2 rating with penetration limited to 1.17 meters.

STANDARD BENEFITS

- Dual arm design for safety and security
- Full 90 degree opening prevents tall vehicles from clipping arm
- Manual rotary hand crank for non-motorized operation
- NEMA 3R all weather enclosure with hot dip galvanized anti-corrosion finish
- Hydraulic arm locks automatically

ADDITIONAL OPTIONS

- Electric drill assist
- Biodegradable, non-toxic fluid
- Remote HydraSupply
- Custom color paint

SYSTEM DESIGN SUPPORT:

Contact HySecurity for CAD drawings, specifications, help with custom site requirements, installer referrals, and other technical support.



Contact HySecurity for an operator/parts distributor near you.
phone **800-321-9947** | **253-867-3700** fax **888-321-9946**
www.hysecurity.com • info@hysecurity.com

**TECHNICAL SPECIFICATIONS for Model
StrongArm™ M50 NP
Drop Anti-Ram Crash Barrier for Clear Openings up to 24 ft (7,315 mm)
02827 HYS**

PART 1 – GENERAL

1.1. INCLUDED IN THIS SECTION

- A. Non-powered drop arm vehicle barrier, including all selected attachments and accessory equipment. Complete with all pumps, valves, and cylinders move barrier arm and limit its travel in both directions.
- B. For further information, call the manufacturer at (800) 321-9947 or visit the website at www.hysecurity.com.

1.2. RELATED WORK SPECIFIED ELSEWHERE

- A. Fencing: See section 02815.
- B. Cast in place concrete: See section 03300.

1.3. SUBMITTALS

- A. Shop drawings: Submit shop drawings under the provisions of Section 01300. Submit drawings showing connections to adjacent construction, range of travel, and all electrical and mechanical connections to the barrier. All underground runs of electrical lines and inductive vehicle obstruction loop locations shall be indicated on drawings. Drawings shall also show the size and location of the concrete footings.
- B. Installation instructions: Submit two copies of manufacturer's installation instructions for this specific project.
- C. Submit manufacturer's completed warranty registration form to Project Manager.
- D. Project list: Submit list of product installations comparable to the subject job. Include date of product installation, installer, and owner's name and location of the project.
- E. Test reports:
 - 1. Each operator shall bear a label indicating that the operator mechanism has been tested for full pressure of all hydraulic components and full stress tests of all mechanical components.

1.4. QUALITY ASSURANCE

- A. Manufacturer: A company specializing in the manufacture of Anti-Ram barriers of the type specified, with a minimum of five years' experience manufacturing operators of this type and design.
- B. Installer: Must have a minimum of three years' experience installing similar equipment, provide proof of attending a HySecurity Technical Training within the previous three years, or obtain other significant manufacturer endorsement of technical aptitude, if required, during the submittal process.

1.5. CODES AND REGULATORY REQUIREMENTS

- A. Vehicular barriers should never be used by pedestrians. A separate pedestrian entrance must always be provided when foot traffic is present.

1.6. PRODUCT DELIVERY AND STORAGE

- A. Comply with 01600.
- B. Store products upright in the original shipping containers, covered, ventilated and protected from all weather conditions.

1.7. WARRANTY

- A. Provide a warranty against all defects in materials or workmanship for five years or 500,000 gate cycles (whichever occurs first) after the date of installation. Defective materials shall be replaced at manufacturer's discretion with new or reconditioned materials furnished by the manufacturer, at no cost to the owner. Freight, labor and other incidental costs are not covered under the factory warranty, but may be covered by a separate service agreement between installing company and the owner.
 - 1. To ensure validation of warranty, complete warranty registration form online at www.hysecurity.com/warranty. Warranty registration form is also included in the printed materials shipped with the operator.

PART 2 – PRODUCTS**2.1. VEHICLE BARRIERS**

- A. HySecurity vehicle barrier model StrongArm™ M50, or other comparable barrier, as approved by the architect or specifier. Substitute barriers that are approved will be published in an addendum, not less than ten days prior to bid opening. Requests for substitution will include the amount of savings to be passed on to the owner.

2.2. OPERATION

- A. Operation shall be by means of a rotary hand pump and hydraulic cylinder acting directly on the drop arm to move the arm through 90° to the open position. Lower or closing shall be accomplished by the use of gravity and a flow control valve which releases the hydraulic fluid from the cylinder. The arm travel time varies depending upon version ordered, see schedule below. The barrier shall include hole locations to secure the arm with a lockable pin in the open and closed positions. The system shall function normally without need for springs or weights to counterbalance the arm. Sprockets, belts or pulleys shall not be incorporated in the operator. Arresting of vehicles shall be accomplished by polymeric straps suspended in the arm.
- B. The vehicle barrier shall be certified by a third party licensed engineer to be capable of withstanding a direct impact from a vehicle to the M50 level specified in ASTM F2656 for 12 ft (3,657 mm) and 24 ft (7,315 mm) lengths. The vehicle barrier shall have successfully passed testing at an accredited test facility to ASTM F2656 as validation of the engineering certification.
- C. Schedule of length and speed capacities:
 - 1. StrongArm M50 12-24 ft (3,657-7,315 mm) clear opening: Travel time of 2 minutes or less with continuous rotation of hand crank to fully open position. Closing speed is 15-25 seconds. Maximum clear opening shall be 24 ft (7,315 mm).
- D. Standard components shall include as a minimum:
 - 1. Chassis: shall be 3/8" (9 mm) steel plate, welded, and edges ground smooth.
 - 2. Cover: shall be 14 gauge (2 mm) galvanized sheet steel, with a security lock to limit access.
 - 3. Main shaft: shall be 3" (76 mm) diameter, high strength steel alloy.
 - 4. Heavy duty sealed 1 15/16" (49 mm) bearings, with cast iron pillow blocks.
 - 5. Resilient physical stop limiting open and close travel and to cushion stop at each end of travel.
 - 6. Hydraulic hose: Shall be 1/4" (6 mm) synthetic, rated to 3,000 psi (20.6 MPa).
 - 7. Hydraulic valves: Shall be individually replaceable cartridge type, in an integrated hydraulic manifold.
 - 8. Hydraulic fluid: High performance type with a viscosity index greater than 375 and temperature range -40° F to 167° F (-40° C to 75° C). (optional biodegradable fluid requires a heater at temperatures below -10° F (-24° C))
 - 9. The hydraulic fluid reservoir shall be formed from a single piece of metal, non-welded, and shall be powder painted on the inside and the outside, to prevent fluid contamination.
 - 10. Arm: Aluminum oval shape for optimal strength, wind resistance and corrosion protection
 - 11. Arm striping: shall be highly reflective alternating red and white vertical stripes, 16" (406 mm) intervals measured horizontally per MUTCD standards.
 - 12. Lower barrier arm at a height of 18" (457 mm) from grade to prevent smaller vehicles from penetrating under the main barrier arm.
 - 13. Finish: hot dipped galvanize coating per ASTM A123 G85.
- E. Electrical requirements: NA
- F. Other options (*choose from the following list*):

1. 5" (127 mm) x 7" (177 mm) single piece aluminum arm with integrated LED lights on both sides from 12 ft (3,657 mm) to 24 ft (7,315 mm) in 2 ft (609 mm) increments.
2. Custom arm length available in 1" (25 mm) increments: _____ft
3. Optional Signal Yellow (RAL1003) or custom color TGIC polyester powder coating over zinc plating per ASTM B633 Type 3 SC-2.
4. Biodegradable, non-toxic hydraulic fluid.

2.3. FACTORY TESTING

- A. Fully assemble and test, at the factory, each barrier to assure smooth operation.
- B. Inspect and test all hydraulics are leak free.
- C. Maintain records of material and process traceability for all critical structural elements.
- D. Check all mechanical connections for tightness and alignment. Check all welds for completeness and continuity.
- E. Inspect finishes for completeness. Touch up imperfections prior to shipment.
- F. Check all hydraulic hoses to assure that chafing cannot occur during shipping or operation.

PART 3 – EXECUTION

3.1. SITE EXAMINATION

- A. Locate concrete footings forms in accordance with approved shop drawings and in compliance with local building codes.

3.2. INSTALLATION

- A. Install barrier in accordance with the safety regulations and the manufacturer's product literature and installation instructions, current at the time of installation. Coordinate locations of operators with contract drawings; other trades and shop drawings.

- 3.3. BARRIER SITING AND SAFETY PRECAUTIONS:** Careful consideration must be given to the selection, placement, and design of a vehicle barrier installation. As is the case with any active vehicle barrier system, perimeter security device, or security gate that blocks a roadway, it is essential to ensure that approaching vehicles as well as pedestrians are fully aware of the presence of the barrier and its operation. Installer will work with End User Customer to provide proper illumination and clearly worded signage (with appropriate graphics) warning of the barrier's presence and its hazards. HySecurity strongly recommends that an architect and/or traffic and/or safety engineer be consulted before installing any active vehicle barrier and that an installation configuration be employed that physically limits approach speeds to no more than 20 mi/h. End User Customer agrees that it will be responsible for selecting the location of the barrier and the configuration of approaches and warnings. HySecurity will offer reasonable assistance in integrating the barrier with external and existing systems, but it does not provide traffic or safety engineering services.

3.4. FIELD QUALITY CONTROL

- A. Test operator through ten full open and close cycles and adjust for operation without binding, scraping or uneven motion. Test limit switches for proper open and close limit positions.
- B. All anchor bolts shall be fully tightened in the finished installation.
- C. Owner, or owner's representative, shall complete "punch list" with installing contractor prior to final acceptance of the installation and submit completed warranty documentation to manufacturer.

3.5. CONTINUED SERVICE AND DOCUMENTATION

- A. Train owner's personnel on how to safely shut off electrical power, release and manually operate the barrier. Additionally, demonstrate the general maintenance of the gate operator and accessories and provide one copy of "Programming and Operations Manual" for the owner's use. Manuals will identify parts of the equipment for future procurement. Direct maintenance personnel to the technical support sections on HySecurity's website at www.hysecurity.com.

NOTE: HySecurity reserves the right to change these specifications at any time, without notice and without

prejudice. Call (800) 321-9947 if you are not sure that you have the latest edition.

CAUTION: Barriers manufactured by HySecurity are intended for use in controlling vehicular traffic and are not intended to be used by pedestrians or to control pedestrian traffic. **Always install a separate pedestrian entry.** Barrier arm type gate operators present a specific hazard to motorcyclists. Please direct motor cycle traffic to another access point.

RE: 200,000 Cycle Testing, HTG Barrier Arm Operators

To Whom It May Concern:

This letter will serve as our affidavit of conformance to specifications that call for testing the gate operator mechanism to at least 200,000 cycles without breakdown.

We have performed reliability tests on our HTG gate arm operator mechanisms to more than 200,000 cycles of operation, and were not able to detect any defects or breakdowns in any component of the operator mechanism or the hydraulic pump unit.

All of these tests were performed at our test facility and factory in Seattle, Washington, USA. The test consists of operating a 20-foot, combination aluminum-fiberglass barrier arm weighing approximately 50 pounds. A cycle consists of a full opening and a full closing. The operators used in the test were all equipped with timers that simulated continuous duty through a ten-hour workday.

Respectfully,



Brian DeNault

President

1. Warranty.

Hy-Security Gate, Inc. ("HySecurity") warrants that at the time of sale each of its products will, in all material respects, conform to its then applicable specification and will be free from defects in material and manufacture.

The following additional durational warranties apply to HySecurity products, depending on whether (1) the product is purchased through an authorized HySecurity distributor and (2) whether a timely and complete product registration is submitted to HySecurity.

It is therefore important that you register your product with HySecurity, online at www.hysecurity.com/warranty, within the 60-day period described below.

1(a) HySecurity Products Purchased Through Authorized Distributors and Properly Registered

For any gate operator product that is purchased from an authorized HySecurity distributor (this excludes product purchased through internet resellers or any distributor not authorized by HySecurity), if the product registration is completed by the Dealer/Installer/End User within 60 days of the date of purchase, the following warranty terms will apply. HySecurity warrants that the product will remain serviceable for the following periods:

- a) Hydraulic Industrial Gate Operators: Five Years or 500,000 gate cycles (whichever occurs first) after the date of installation,
- b) Electromechanical Slide and Swing operators: Five Years after the date of installation—unless installed in a single family residential application, in which case the warranty term shall be Seven Years after the date the product is shipped from HySecurity,
- c) Electromechanical Barrier Arm Operators: Two Years or 1,000,000 gate cycles (whichever occurs first) after the date of installation,
- d) Hydraulic Wedge Operators and Electromechanical Surface Mount Wedge Operator: Two Years or 500,000 gate cycles (whichever occurs first) after the date of installation;

provided that the preceding 5-year warranty period in (a) and (b) will not extend beyond seven years from the date that the product was shipped from HySecurity, and the 2-year warranty period in (c) and (d) will not extend beyond four years from the date that the product was shipped from HySecurity.

The preceding warranty durations do not apply to the products or components described below (e-h), which have a shorter warranty period.

- e) Hydraulic Gate Operator Drive Wheels including XtremeDrive™ wheels and rack: Two Years from date of installation.
- f) AC and DC power supplies, chargers and inverters and HyNet module: Two years from date of installation, except batteries.
- g) Batteries: One Year from date of shipment from HySecurity.
- h) Components subject to normal wear including, but not limited to, chains, belts, idler wheels, sprockets and fuses: One Year from date of installation.

1(b) HySecurity Products Not Purchased Through an Authorized Distributor or Not Properly Registered within 60 Days

For any product that is not purchased from an authorized HySecurity distributor or for which the product registration was not completed by the Dealer/Installer/End User within 60 days of the date of purchase, the following

One-Year Limited Warranty will apply: HySecurity warrants that the product will remain serviceable for the following periods, which begin on the date that the product was shipped from HySecurity:

- a) All Gate Operators: One Year or 100,000 gate cycles whichever comes first.
- b) AC and DC power supplies, chargers or inverters: One Year.
- c) HyNet module: One Year.
- d) Hydraulic Gate Operator Drive Wheels: One Year.

1(c) Replacement Parts

HySecurity warrants that replacement parts (whether new or reconditioned) will remain serviceable for One Year from the date that the product was shipped from HySecurity or the remaining period of the Gate Operator warranty, whichever is longer.

1(d) Limitations and Exclusions Applicable to Each of the Preceding Warranties.

The preceding warranties shall not apply to equipment that has been (1) installed, maintained, or used improperly or contrary to instructions; (2) subjected to negligence, accident, vandalism, or damaged by severe weather, wind, flood, fire, terrorism or war; or (3) damaged through improper operation, maintenance, storage or abnormal or extraordinary use or abuse. Any modification made to products will void the warranty unless the modifications are approved in writing by HySecurity in advance of the change (this exclusion does not apply to

normal installation of approved accessories and/or protective devices or sensors). It is the responsibility of the distributor, installer, or End User to ensure that the software version in the product is maintained to the latest revision level.

The preceding warranties do not extend to accessories when those items carry another manufacturer's name plate and they are not a part of the base model. HySecurity disclaims all warranties for such accessory components, which carry only the original warranty, if any, of their original manufacturer. HySecurity hereby assigns its rights under such manufacturer warranties—to the extent that such rights are assignable—to Buyer.

These warranties extend to HySecurity's Distributors, to the Dealer/Installer, and to the first End User of the product following installation. They do not extend to subsequent purchasers.

2. Exclusion of Other Warranties.

The warranties contained in Section 1 are the exclusive warranties given by HySecurity and supersede any prior, contrary or additional representations, whether oral or written. Any prior or extrinsic representations or agreements are discharged or nullified. HYSECURITY HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES—WHETHER EXPRESS, IMPLIED, OR STATUTORY—INCLUDING ANY **WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ANY LIABILITY, FOR INFRINGEMENT, AND ANY IMPLIED WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE.**

3. Buyer's Exclusive Remedies for Any Nonconformity.

If a HySecurity product fails to conform to the warranties in Section 1, Buyer must notify and order replacement parts from the Distributor through which the product was purchased within a reasonable time and in no event more than thirty (30) days after the discovery of the nonconformity. HySecurity will investigate and, in the event of a breach, will provide, within a reasonable period of time, one of the following: (1) repair or replacement of any nonconforming products or components or (2) refund of the price upon return of the nonconforming items. HySecurity reserves the right to supply used or reconditioned material for all warranty claims. HySecurity will not be considered to be in breach of or default under this Warranty because of any failure to perform due to conditions beyond its reasonable control, including any force majeure. This warranty does not cover any incidental expenses, including fines or penalties, temporary security, labor, shipping, travel time or standby time that are incurred for inspection or replacement of any nonconforming items. As a condition of warranty coverage, warranty claims must be submitted in accordance with the procedures described on the HySecurity form, "RMA Procedures."

THE REMEDY SELECTED BY HYSECURITY IN ACCORDANCE WITH THIS PARAGRAPH SHALL BE THE **EXCLUSIVE AND SOLE REMEDY OF BUYER FOR ANY BREACH OF WARRANTY.**

4. Exclusion of Consequential and Incidental Damages.

HYSECURITY SHALL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE, OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT OR FROM HYSECURITY'S OWN NEGLIGENCE. This exclusion applies regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, or strict liability. This exclusion does not apply to claims for bodily injury or death.

5. Severability.

If any provision of this warranty is found to be invalid or unenforceable, then the remainder shall have full force and effect.

6. Proprietary Rights.

HySecurity retains and reserves all right, title, and interest in the intellectual property rights of its products, including any accompanying proprietary software. No ownership of any intellectual property rights in the products or accompanying software is transferred to Distributor, Dealer/Installer or End User.

7. Applicable Law.

This warranty will be interpreted, construed, and enforced in all respects in accordance with the laws of the State of Washington, without reference to its choice of law principles. The U.N. Convention on Contracts for the International Sale of Goods will not apply to this warranty.