Barrier Arms

Concentric Security’s barrier arm solutions are used to protect against a variety of vehicle threats. These barrier arms have been designed and crash tested to meet the DOS K12 (ASTM M50/P1) specification down to the U.S. Marshall and U.S. Navy specifications. With the product lines offered, applications can be customized to fit each location and terrain features.

We offer the advantage of integrating non-rated anti-personnel gates into rated anti-vehicular systems. Concentric Security’s barrier arm solutions are fabricated in a variety of lengths, materials, operational configurations, and performance ratings to meet the customer’s needs. Depending on the application and the challenges of a specific facility, there are many types of barriers. Determining which barrier meets specific requirements is a challenge.

Features

• Variety of materials available (wood, fiberglass, steel, cable reinforced aluminum)
• Most products are available in counter-weighted manual versions with the proper length, the complete roadway can be protected
• Traffic lights, traffic arms, vehicle detections loops, and IR beams can be provided for additional safety features
• Systems can be integrated into other security features, equipment, and controls

Types

• Drop Arms
• Swing Arms
• Sliding Beam Barriers
• Vertical Pivot Beam Barriers
• Rising Beam Barriers

Typical Uses

• Government Facilities
• Military Installations
• Parking Lot and Loading Docks
• Financial Institutions
• Industrial and Petrochemical Facilities
• Access Control
Bollards

Concentric Security's bollard solutions are used to protect against a variety of vehicle threats. These bollards have been designed and crash tested to meet specifications down to non-rated requirements. Our bollard solutions are fabricated in a variety of diameters, height, operational configurations, and performance ratings to meet the project’s needs.

Features

• Design flexibility with colors and exterior sleeves to match existing bollards and architecture
• Center-to-center dimensions can vary with engineered models to maximize roadway protection with minimal product
• Systems can be integrated into other security features, equipment and controls
• EFO available on most automatic models
• Traffic lights, traffic arms, vehicle detections loops can be provided for additional safety features

Types

• Automatic Bollards
  • Hydraulic
    • Proven product in security industry
    • With proper maintenance, years of available service
    • Environmentally friendly hydraulic oil
  • Electric
    • Although higher install costs, reduced life maintenance, and operational costs
    • Reduced environmental impact
    • Lights available in some models

• Matador Shallow Mount Sliding Bollard
• Raptor Shallow Mount Bollard
• Manual
  • Least cost with exclusion of operating system
  • Physical operation of each bollard required
  • Key lockable

• Removable Bollards
  • Internal or external locking systems
  • Physical removal required (high-security versions may require heavy lifting equipment)
  • Heavy Duty versions available

• Fixed Bollards
  • Permanent solution to preventing unauthorized vehicular access
  • Shallow Mount versions can be installed to avoid underground utilities
  • Surface Mount versions for flexibility and temporary perimeter security requirements
Matador Shallow Mount Sliding Bollards

Matador Shallow Mount Sliding Bollards are ideal for installations where excavation is challenging. Low profile and safe operation make it perfect for areas where constant pedestrian access is required. Great for temporary or permanent installations.

The Matador Shallow Mount Sliding Bollards Solution includes the following features:

- Requires minimal excavation and disruption to road surface
- Engineered for safety without pinch points, trip hazards, and voids
- High duty cycle
- Engineer rated to K4, K8, or K12
- Visible to drivers and pedestrians at all times
- 5” high surface mount or 11” excavation
- Level or ramped to slow traffic
- Easy to clean and maintain
- Three, four and six bollard units
- Available as Hydraulic, Electro Mechanical, or Manual
- Sleek, stylish design options to blend with any environment

Operation

- Electro Mechanical
  - Reduced carbon footprint by utilizing 80% less electricity to operate
  - Runs off a single-phase power supply
  - Operable from a generator when no power supply is available
  - Smaller control cabinet, reducing space requirements

- Manual
  - Great for sites where no power supply is available
  - Small control cabinet, reducing space requirements

Matador is a great choice for a variety of applications, to include:

- Stadiums and Entertainment Venues
- Professional Sports Teams
- City Entertainment Districts
- Energy Facilities
- Federal, State and Local Government
- Data Centers

Options

- Architectural Paving System
- Custom Covers and Base Plates
- Battery Backup
- Heat Mats
- LED Lighting
Raptor Shallow Mount Bollard

The Raptor Shallow Mount Bollard solution’s unique design gives it the strength to make it a truly formidable defense, guarding against the highest level of vehicular threat. The shallow foundation solution requirement offers cost-effective installation and flexibility.

The Raptor include the following features:

- Practical installation
- Shallow 20” excavation
- Minimal concrete required, approximately 2 yards
- Single or multiple units for wider roads
- Engineered for safety without pinch points, trip hazards, and voids
- High duty cycle
- ASTM M50-P1 and C40-P1 Crash Tested
- Tested as a single unit
- Operational after testing with minor repair
- Sleek, stylish design
- Hot dip galvanized to assist with corrosion resistance
- Can be integrated and operated by most access control systems
- Available as Hydraulic, Electro Mechanical, and Manual
- Reduced operational costs
- Lower maintenance requirements

Operation

- Electro Mechanical
  - Reduced carbon footprint by utilizing 50% less electricity to operate
  - Runs off a single-phase power supply
  - Operable from a generator when no power supply is available
  - Smaller control cabinet, reducing space requirements
- Manual
  - Great for sites where no power supply is available
  - Operated via a battery drill

Raptor is a great choice for a variety of applications, to include:

- Stadiums and Entertainment Venues
- Professional Sports Teams
- City Entertainment Districts
- Energy Facilities
- Federal, State, and Local Government
- Data Centers

Options

- Emergency Fast Operation (EFO)
- Heat Trace
Perimeter Security Gates

Concentric Security’s perimeter gate solutions protect against a variety of vehicle and personnel threats. These gates have been designed and crash tested to meet the DOS K12 (ASTM M50/P1) anti-vehicle specification down to simple anti-personnel requirements.

The perimeter gate solutions come in a variety of lengths, materials, operational configurations, and performance ratings to meet the customer’s needs. Depending on the application and the challenges of a specific facility, there are many types of barriers. Determining which barrier meets specific requirements is a challenge.

Features
- Flexibility to match existing fence
- Aluminum pickets
- Narrow picket spacing to apply anti-climb / anti-scale requirements
- Non-rated gates can be integrated with rated gates
- Traffic lights, traffic arms, vehicle detections loops available for additional safety features
- Systems can be integrated into other security features, equipment, and controls

Types
- Swing Gates
  - Practical for pedestrian up to full roadway use
- Sliding Gates
  - Ground transport system supports gate across the entire roadway width
- Cantilever Gates
  - Post mounted transport system supports gate on one roadway side
  - Road contours are not as critical in this application
- Vertical Pivot Gates
  - Available when cantilever, swing, sliding clearances may be an issue
- Access Control Gate Solution

Operator Features
- Horizontally chain or rail driven
- AC or DC power requirements
- UPS battery backups to provide power for a limited time after power failure
- Receive or transmitter for remote operation
- Heater or fan can be integrated to provide operation in severe weather
- Traffic lights, traffic arms, vehicle detections loops, IR beams can be provided for additional safety features
- Additional safety features can be added to the system to meet UL325 requirements
- Systems can be integrated into other security features, equipment, and controls

Typical Uses
- Government Facilities
- Military Installations
- Shipping Yards
- ACP and ECF entrances
- Secured Parking or Property Boundaries
- Law Enforcement and Correction Facilities
Wedge & Plate Barriers

Concentric Security's wedge and plate barriers solutions are used to protect against a variety of vehicle threats. These wedge and plate barriers have been designed and crash tested to meet the specifications.

This type of barrier has become the flagship of the high security industry. They range in applications from traffic control to final denial. Concentric Security's wedge and plate barriers are fabricated in a variety of lengths, heights, excavation depths, operational configurations, and performance ratings to meet the project's needs.

**Features**

- **Hydraulic**
  - Proven product in the high security industry
  - Years of available service with proper maintenance
  - Environmentally friendly hydraulic oil
- **Electric**
  - Higher install costs offset by reduced life cycle maintenance and operational costs
  - Reduced environmental impact
  - LED Lights available on the attack face of some models
  - EFO available on most models
  - Ice melt systems, oil reservoir heaters, oil coolers can be integrated to provide operation in severe weather
  - Traffic lights, traffic arms, vehicle detection loops can be provided for additional safety features
  - Systems can be integrated into other security features, equipment, and controls

**Types**

- **Shallow Mount**
  - Requires a minimum excavation to avoid underground utilities
  - Most common barrier installed today
- **Viper Shallow Mount Wedge Barrier**
- **Surface Mount**
  - Excavation is not available or is limited
  - Stanchions can be integrated with traffic lights and gate arms
- **Portable**
  - Temporary barriers used during increased security levels or special events
Viper Shallow Mount Wedge Barrier

The Viper Shallow Mount Wedge Barrier is manufactured from heavy steel plate to distribute the impact energy. Installation requires only 16” excavation, about 3 cubic yards of concrete and no precast pit. The Viper is specially constructed to be a formidable defense in the advent of a threat from any vehicles.

The Viper includes the following features:

- Practical installation
- Minimal concrete required, approximately 3 yards
- Engineered for safety without pinch points, trip hazards, and voids
- High duty cycle
- ASTM M50-P1
- Sleek, stylish design
- Can be integrated and operated by most access control systems
- Single access panel
- Reduced operational costs
- Lower maintenance requirements
- 41” High Raised Top Plate for Increased Security
- Creative Design Protects Hydraulics in an Impact
- Quick Operation Speed
- Shallow 16” Excavation depth
- Protective skirt for safety and reliability, reducing debris collection
- No Concrete Reinforcement Required

Viper is a great choice for a variety of applications, to include:

- Stadiums and Entertainment Venues
- Professional Sports Teams
- City Entertainment Districts
- Energy Facilities
- Federal, State, and Local Government
- Data Centers
- Access Control Points
- Military Installations
- Industrial and Petrochemical Facilities
- Heavy Traffic Entrances

Options

- LED Lighting
- Emergency Fast Operation (EFO)
- High Security Lock Out Valve
Fabricated Engineered Structures

Concentric Security’s fabricated engineered structures solutions are used to meet the customer’s needs in a variety of ways. Guard booths, gatehouses, overwatch booths, bus shelters, canopies, and electrical equipment buildings, are just a few of the items available.

Features

- **Guard booth, gatehouse, overwatch booth**
  - Overhanging canopy
  - Steel or aluminum framing
  - Counter with sliding drawers
  - Tempered safety glass
  - Fixed, horizontal sliding, vertical sliding windows
  - Heater and air conditioner options
  - Fluorescent and floodlights
  - Lifting rings and/or forklift slats
  - Treadplate flooring
  - Insulated for energy efficiency
  - State certification and labeling available on some models
  - Professional engineering approval
  - ADA compliance
  - Restroom integrated models
  - Ready to brick configuration
  - Telephone and communication jacks
  - UL 752 ballistic rating 1, 3, 5, 8 for high protection requirements

- **Quick Ship Guard Booths**
  - 4’x6’, 4’x7’, and 6’x8’

- **Canopies**
  - Weather protection for personnel, equipment, and vehicles
  - Tandem column design
  - Professional engineering approval

- **Bus Shelter**
  - Provided to keep your customers out of the weather during vehicle inspection
  - Shipped in a knock-down form to be easily assembled and installed at the location

Typical Uses

- Government Facilities
- Military Installations
- Secured Property or Parking Entrances
- Law Enforcement and Correction Facilities
- Industrial and Petrochemical Facilities
- ID Check Areas
- Passenger and Commercial Vehicle Search Areas
- Element Protection
Architectural Precast Concrete

Concentric Security’s streetscape solutions combine form, function, and strength with security and resilience with innovations allowing for areas where space for excavation is limited due to underground infrastructure. Our streetscape solutions are an ideal solution to provide temporary or permanent setback distance for your facility.

Features
• Unique designs, colors, and options to blend in with any environment
• Products can hide high-security bollard systems
• Shallow foundation requiring minimal excavation available
• Flexible arrangements and layouts
• Low maintenance
• Custom perimeters for your site characteristics
• Multiple mounting options
• Steel Reinforced
• Variety of colors and finishes

Types
• Bollards
• Planters
• Spheres
• Walls
• Benches

Typical Uses
• Government Facilities
• Colleges and Universities
• Airport / Cruise Terminals
• Secured Property or Parking Boundaries
• Vehicular Setbacks
• High Security Bollard Covers