

ARCHITECTURAL FENCE GUIDE

CONSTRUCTION SPECIFICATION 32 31 00



ORNAMENTAL STEEL FENCES & GATES | ORNAMENTAL ALUMINUM FENCES & GATES
HIGH SECURITY FENCES & GATES | ENGINEERED CANTILEVER, ROLL & PEDESTRIAN EGRESS GATES



FENCE PRODUCTS

AMERISTARFENCE.COM | 800-321-8724

Experience a safer and more open world

AMERISTAR®

ASSA ABLOY



ARCHITECTURAL SUPPORT AND SOLUTION SERVICES

Ameristar's Project Solution Specialists are experienced in every facet of perimeter security design. Our goal is to assist the architectural community in finding the best perimeter and entry solutions for their projects.

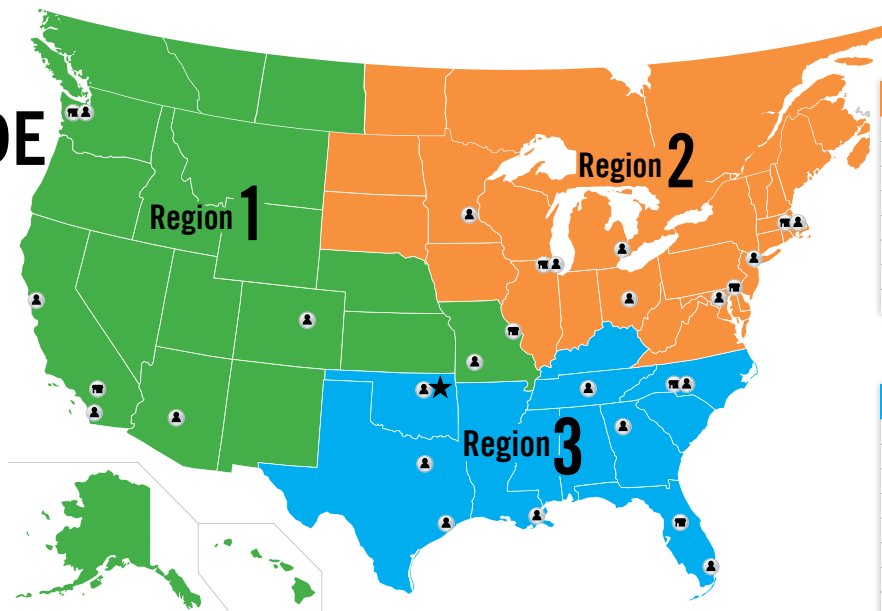
SERVICES

- Extensive library of project photos
- BIM & CAD drawings
- Architectural specifications
- Project budget quotes

AVAILABLE NATIONWIDE

-  Market Developer
-  Sales and Service Centers
-  Ameristar Headquarters

REGION 1		
1. SEATTLE, WA		
2. SAN FRANCISCO, CA		
3. SAN DIEGO, CA		
4. RIVERSIDE, CA		
5. PHOENIX, AZ		
6. DENVER, CO		
7. SPRINGFIELD, MO		
8. ST. LOUIS, MO		



REGION 2		
1. MINNEAPOLIS, MN		
2. CHICAGO, IL		
3. DETROIT, MI		
4. COLUMBUS, OH		
5. BOSTON, MA		
6. NEWARK, NJ		
7. BALTIMORE, MD		
8. PHILADELPHIA, PA		

REGION 3		
1. TULSA, OK		
2. DALLAS, TX		
3. HOUSTON, TX		
4. NEW ORLEANS, LA		
5. NASHVILLE, TN		
6. ATLANTA, GA		
7. CHARLOTTE, NC		
8. ORLANDO, FL		
9. MIAMI, FL		

Continuing to add additional locations.

EDUCATION

As a registered AIA/CES provider, we offer a variety of educational LU, HSW and CE programs to help you make informed decisions, including the following:

- Architectural Perimeter Security Alternatives
- Bollards – Perimeter Security and Traffic Management Design & Practices
- Codes and Standards for Perimeter Security
- Fence Framework – Design and Construction Standards
- Integration of Safety Standards Site/Climate Conditions with Gates and Automation
- Perimeter Security Planning, Products and Procedures
- Understanding Modern Ornamental Fence Products and Applications

All programs listed above qualify for AIA/CES learning units.

See complete list of
all programs offered at
ameristarfence.com/education



AFFILIATES

- Airports Council International ACI-NA (ACI)
- American Association of Airport Executives (AAAAE)
- American Fence Association (AFA)
- American Institute of Architects (AIA)
- American Society for Industrial Security (ASIS)
- American Society of Landscape Architects (ASLA)
- Chain Link Fence Manufacturers Institute (CLFMI)
- Security Industry Association (SIA)
- Society of American Military Engineers (SAME)

See full list of affiliates on our website



MONTAGE[®] PRODUCTS

Profusion Welded
Ornamental Steel Fence

MONTAGE II[®]

Industrial Ornamental Steel Fence

MONTAGE COMMERCIAL[®]

Commercial Ornamental Steel Fence

MONTAGE PLUS[®]

Ornamental Steel Fence

Montage fence systems are coated inside and out for maintenance-free protection.



Montage fence systems are backed by over 30 years of excellence in the fencing industry.



Ameristar is committed to providing products that meet the Buy American Act.



Ameristar products have the opportunity to earn LEED points.





PROFUSION WELDING

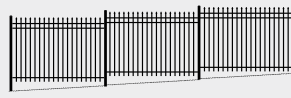
Montage fence panels are fabricated through a welding technique that combines laser and fusion technology to create a virtually invisible structural connection at every picket to rail intersection. Montage welded steel construction is unmatched in strength and durability.

RAKEABLE VS STAIR-STEP

The ProFusion welded picket to rail connection is the method used to construct Montage panels, which allows a minimum biasability of 25%, eliminating any possible security risks due to large gaps under the fence panels.



FULLY RAKEABLE PANELS

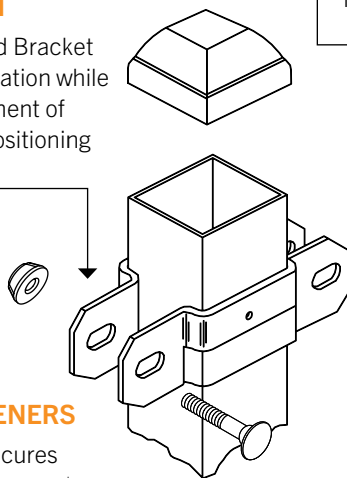


STAIR-STEPPING PANELS



PANEL BRACKET

Universal Boulevard Bracket enables easy installation while allowing for adjustment of panel height and positioning

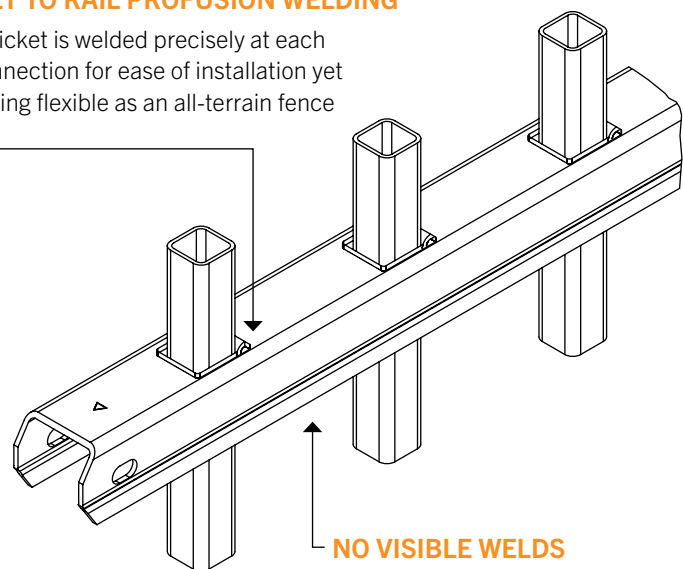


SECURITY FASTENERS

Security fastener secures the rail and deters removal by typical tools

PICKET TO RAIL PROFUSION WELDING

Each picket is welded precisely at each rail connection for ease of installation yet remaining flexible as an all-terrain fence



NO VISIBLE WELDS

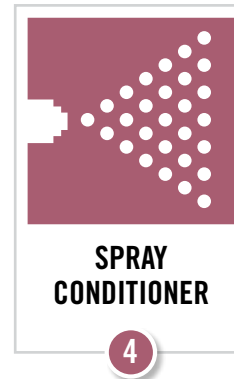
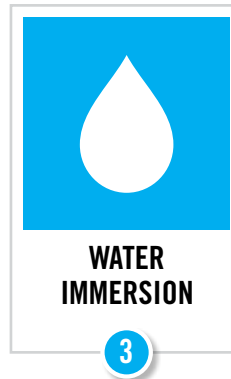
Profusion welding techniques are both strong and hidden from view providing a good neighbor profile

E-COAT™

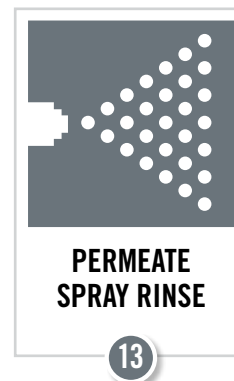
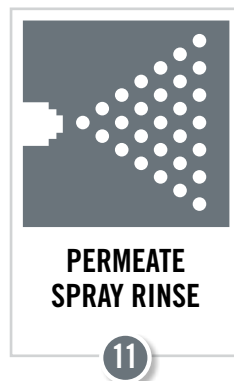
Major corrosion problems start from the inside. That's why all products in the Montage® family are coated inside and out. Our galvanized steel framework is subjected to a multi-stage pre-treatment/wash, followed by a duplex cathodic electrocoat system consisting of an epoxy primer, which significantly increases corrosion protection, and an acrylic topcoat, which provides the protection necessary to withstand adverse weathering effects.



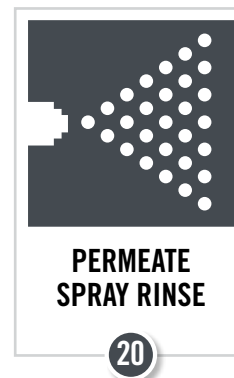
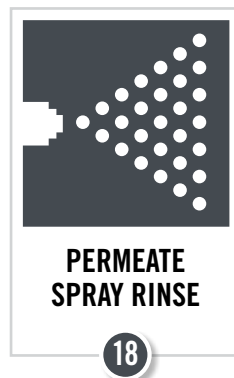
PRE-TREATMENT

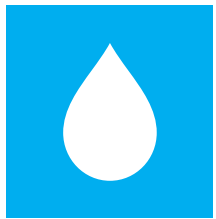


EPOXY PROCESS



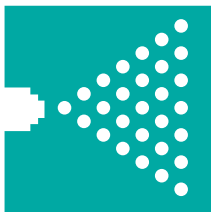
ACRYLIC FINISH





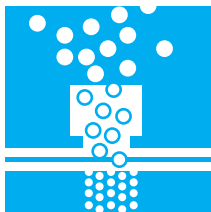
**WATER
IMMERSION**

6



**NON-CHROMATE
SPRAY SEAL**

7



**REVERSE OSMOSIS
IMMERSION**

8



**REVERSE OSMOSIS
HALO RINSE**

9

Immersion processes coat and cleanse the inside of the fence components as thoroughly as the outside. This prevents corrosion, giving Montage products the ability to withstand the elements and be maintenance-free.



**FINISH CURING
OVEN**

15



**COOLING
TUNNEL**

16



**FINISH CURING
OVEN**

22



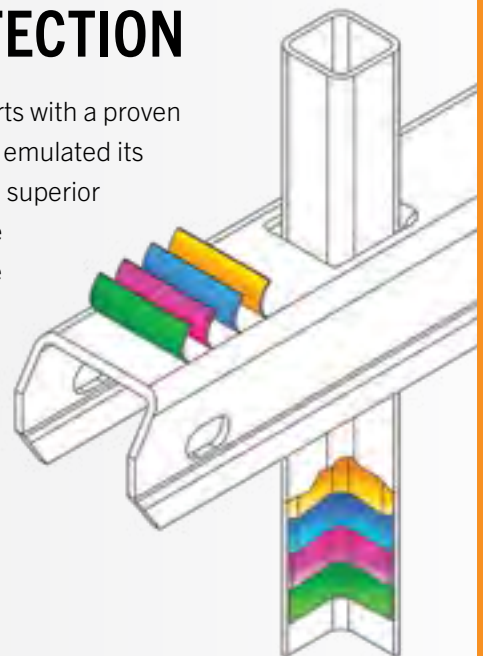
**COOLING
TUNNEL**

23

LAYERED PROTECTION

Protection against corrosion starts with a proven process, which is why Ameristar emulated its PermaCoat method to develop a superior E-Coat process that protects the product with complete coverage inside and out.

-  ACRYLIC TOPCOAT
-  EPOXY PRIMER
-  PHOSPHATE
-  GALVANIZED STEEL



MONTAGE II®

Industrial Ornamental Steel Fence



Built for strength yet a penchant for beauty, Montage II is an industrial grade steel fence that delivers on both levels. Superior welding techniques create a profile that lends itself to landscaping design while maintaining a level of perimeter security that is unmatched.

PRIMARY APPLICATIONS

- State Facilities
- Government Facilities
- Airports
- Water Treatment & Storage
- Public Housing Authorities
- Parks & Recreation
- Stadiums & Event Centers
- Universities
- Hospitals
- K-12 Schools

PICKETS

1" SQ. x 14 GA.

RAILS

1.75" x 1.75" x 12 GA.

POSTS

2.5" SQ. x 12 GA.
3" SQ. x 12 GA.

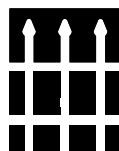
HEIGHTS

3', 3½', 4', 4½', 5', 6', 7', 8'



Montage II gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

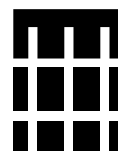
STYLES



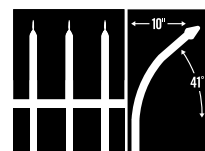
CLASSIC™



MAJESTIC™



GENESIS™



INVINCIBLE™

ADORNMENTS



QUAD FLARE



TRIAD



ROYALTY



BALL CAP

COLORS

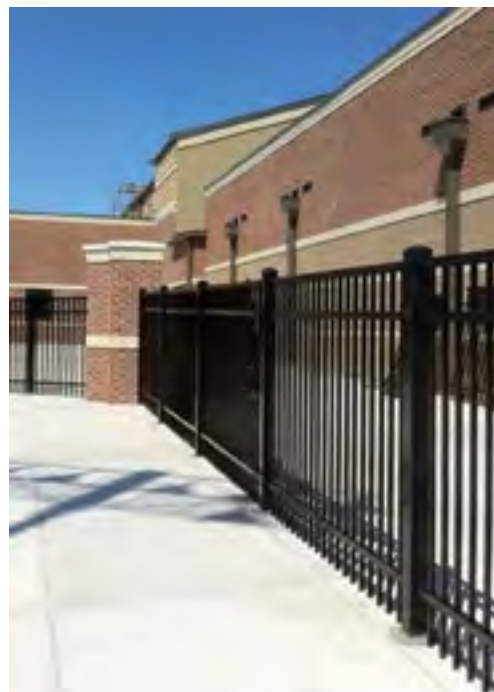
Refer to color sample for actual color



BLACK

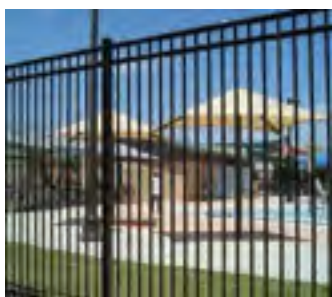
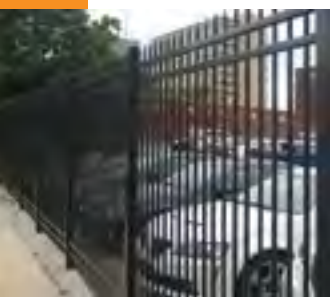


BRONZE



MONTAGE COMMERCIAL[®]

Commercial Ornamental Steel Fence



PRIMARY APPLICATIONS

- Commercial Developments
- Municipal Facilities
- Self Storage
- Parking Facilities
- Parks & Recreation
- Universities
- K-12 Schools

Montage Commercial steel fences have redefined the commercial fence industry with strength that matches the level of security demanded. In the past commercial fencing was defined as a chain link fence with three strands of barb wire, today Montage Commercial ornamental fences are the standard for security fencing.

PICKETS

.75" SQ. x 14 GA.

RAILS

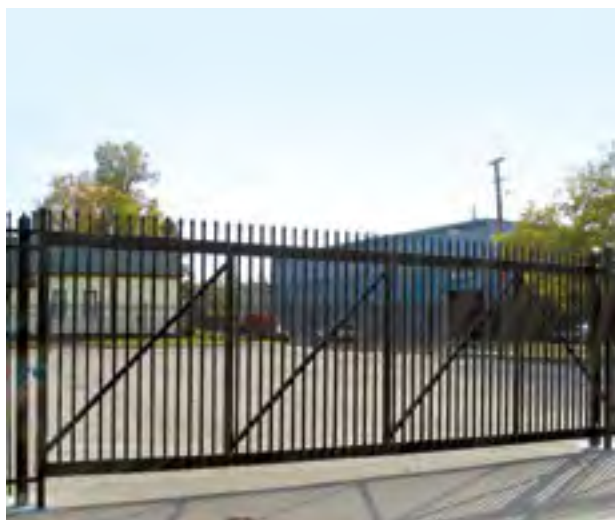
1.4375" x 1.5" x 14 GA.

POSTS

2.5" SQ. x 14 GA.

HEIGHTS

7', 8'



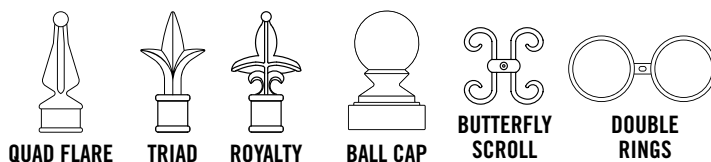
Montage Commercial gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

STYLES

*Also available in Pool, Pet & Play (3" air spacing)**

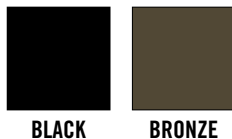


ADORNMENTS



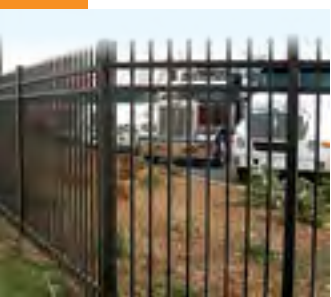
COLORS

Refer to color sample for actual color



MONTAGE PLUS[®]

Ornamental Steel Fence



PRIMARY APPLICATIONS

- Commercial Developments
- Self Storage
- Apartments (Multi-Family)
- Parks & Recreation
- Schools & Universities
- Childcare Facilities

The Montage Plus ornamental steel fence has the versatility to fit many different project applications. With its ability to traverse varying grades, variety of distinct product styles and unmatched coating performance, Montage Plus is the preferred choice for ornamental fence.

PICKETS

.75" SQ. x 18 GA.

RAILS

1.4375" x 1.50" x 14 GA.

POSTS

2.50" SQ. x 16 GA.

HEIGHTS

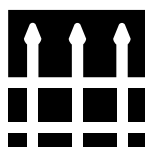
3', 3½', 4', 4½', 5', 6'



Montage Plus gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

STYLES

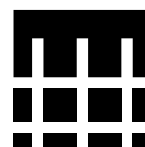
*Also available in Pool, Pet & Play (3" air spacing)**



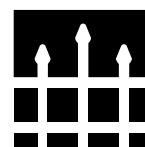
CLASSIC™*



MAJESTIC™*



GENESIS™*



WARRIOR™

ADORNMENTS



QUAD FLARE



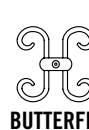
TRIAD



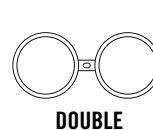
ROYALTY



BALL CAP



BUTTERFLY
SCROLL



DOUBLE
RINGS

COLORS

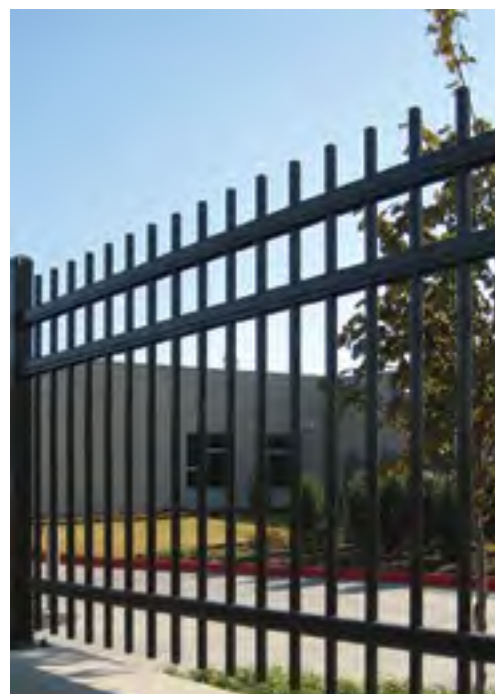
Refer to color sample for actual color



BLACK



BRONZE





AEGIS[®] PRODUCTS

**Internally secured
Ornamental Steel Fence**

AEGIS II[®] Xtreme

Pedestrian Ornamental Railing

AEGIS II[®]

Industrial Ornamental Steel Fence

AEGIS PLUS[®]

Commercial Ornamental Steel Fence

*Ameristar's Aegis
fence systems
are protected to
endure the
elements and are
maintenance-free.*



*Ameristar's Aegis
fence systems
are backed by
over 30 years of
excellence in the
fencing industry.*



*Ameristar is
committed
to providing
products that
meet the Buy
American Act.*



*Ameristar
products
have the
opportunity
to earn
LEED points.*



FORERUNNER® LOCKING SYSTEM

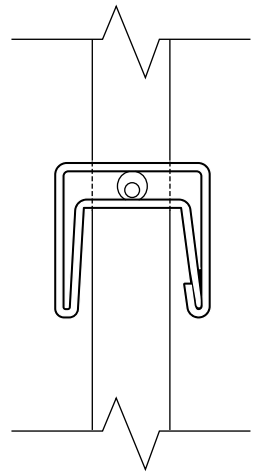
Ameristar crafted the ForeRunner rail to increase strength through architecture. The innovative design of the ForeRunner rail contains an internally secured rod that allows for variable pitch connection, high-angle biasability and eliminates the need for visually unappealing external fasteners. The ForeRunner rail is galvanized inside and out to protect against internal corrosion, putting it in the upper echelon of fencing solutions.

Increased security

The ForeRunner Rail with internal retaining rod prevents the attachment from being compromised. Fasteners are not exposed.

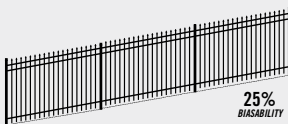
Aesthetic details

“Good Neighbor Design” rod follows ForeRunner centerline providing a clean and uninterrupted look, void of visible screws or rivets.

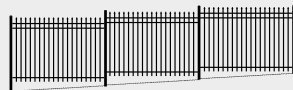


RAKEABLE VS STAIR-STEP

Having a unique picket to rail connection allows Aegis products a minimum biasability of 25%, eliminating any possible security risks due to large gaps under the fence panels.



**FULLY RAKEABLE
PANELS**



**STAIR-STEPPING
PANELS**



GROMMET

Aesthetic appearance while preventing moisture collection

INTERNAL RETAINING ROD

Variable pitch connection system provides ease of installation, high-angle biasability and eliminates unsightly external fasteners

FORERUNNER™ RAIL

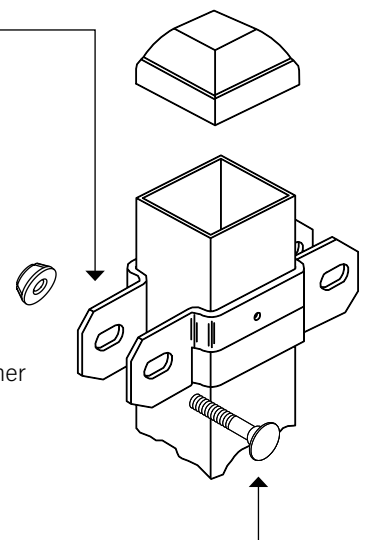
“U” Channel is a specifically formed, high-strength architectural shape

PANEL BRACKET

Universal Boulevard Bracket enables easy installation while allowing for adjustment of panel height and positioning

SECURITY FASTENERS

Security fastener secures the rail and deters removal by typical tools

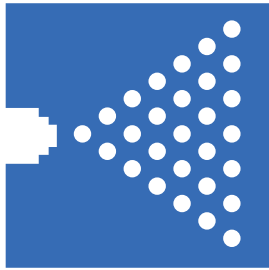


PERMACOAT™

The majority of Ameristar products are protected by the unique PermaCoat process. Our pre-galvanized steel base material is subjected to an 11-stage process to cleanse & prepare the steel for a dual top-coat finish. PermaCoat's corrosion resistant abilities far surpass those of painted surfaces and have a "no-mar" polyester powder top coat. This dual coating not only provides resistance from weathering but also reduces scratch and burnishing marks typically encountered during shipping.



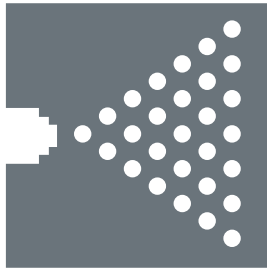
PRE-TREATMENT



ALKALINE WASH

Cleans metal for proper adhesion of zinc phosphate

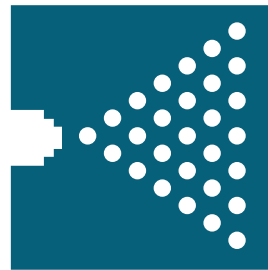
1



FIXIDINE RINSE

Rinses excess alkaline prior to zinc phosphate application

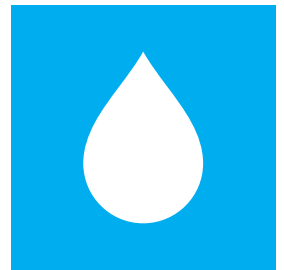
2



PHOSPHATE

Corrosion resistant layer that assists in bonding powder coating

3

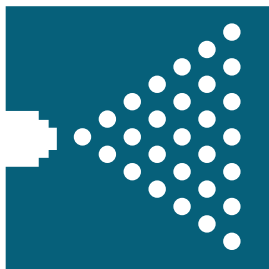


CLEAR WATER RINSE

A bit of clean H2O to prep for the next phase

4

DOUBLE COATING



EPOXY POWDER COAT

Epoxy powder is electrostatically applied

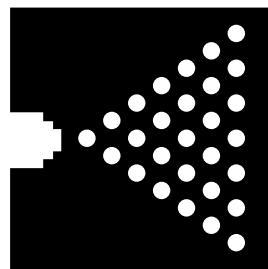
8



EPOXY GEL OVEN

Powder is gelled & cured to finish coat

9



POLYESTER POWDER

TGIC powder is electro-statically applied

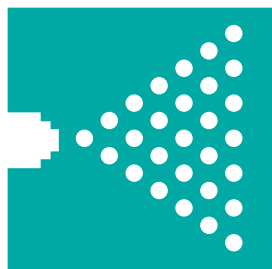
10



FINISH CURING OVEN

Seals finish for years of maintenance-free use

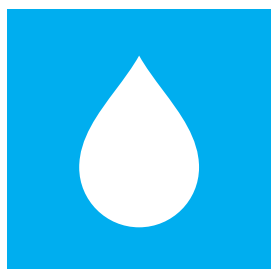
11



NON-CHROMATE SEAL

Barrier to prevent moisture from reaching base metal

5



CLEAR WATER RINSE

Final wash in H₂O to remove any excess debris or particles

6



DRYING OVEN

Eliminates all moisture prior to double coating

7

Once completed, these 7 stages will have removed everything from the surface of the steel that might inhibit the finish from properly adhering during the next 4 stages of the coating process.

CORROSION TESTING

Corrosion occurs more easily without the proper preparation and protection, which is why Ameristar has put our fence products to the test based on ASTM B117 standards. The results speak for themselves.



PAINTED STEEL



PRIMED & PAINTED STEEL



SINGLE COAT PROCESS
Iron Phosphate +
Polyester Powder Coat



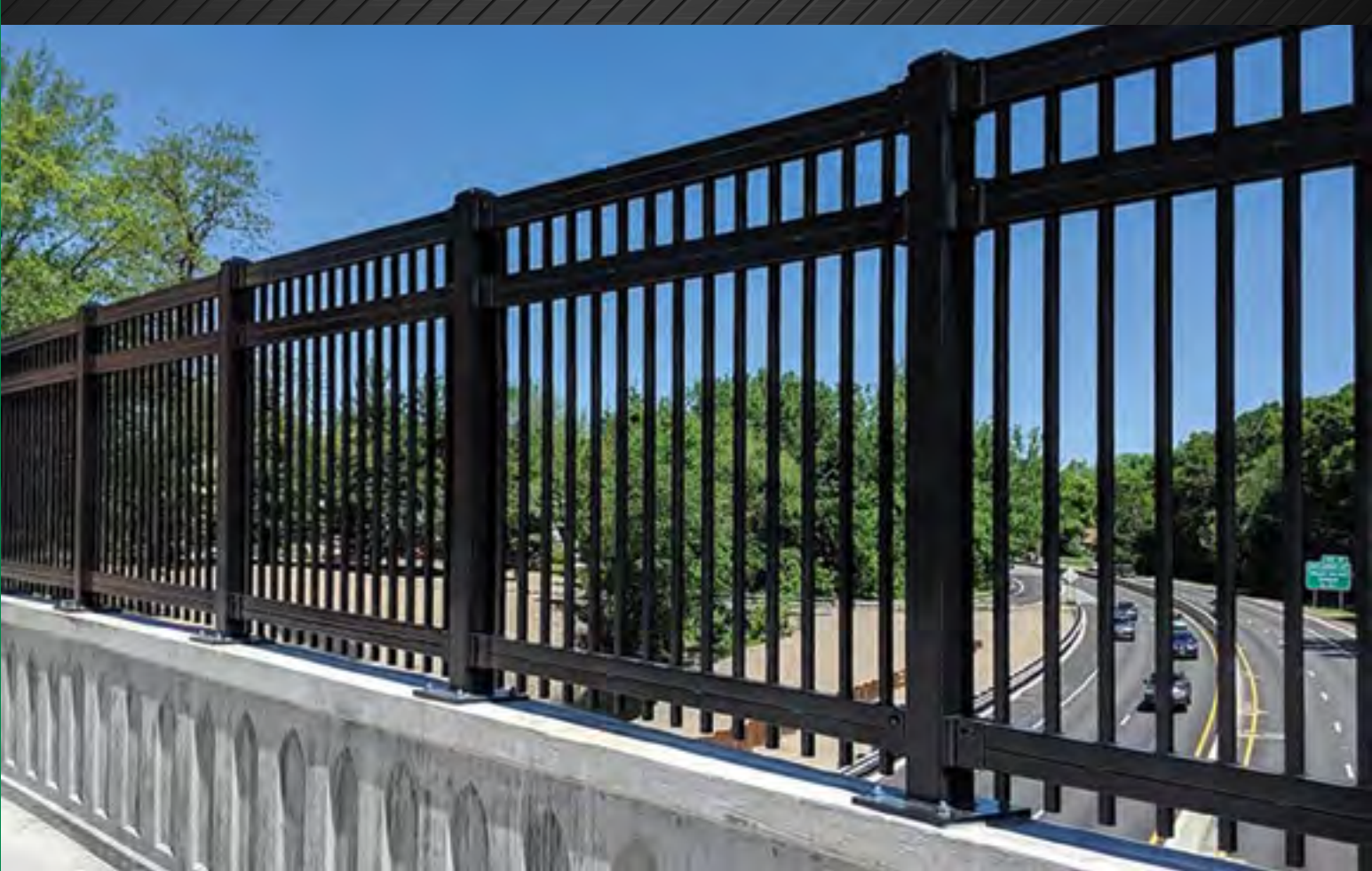
SINGLE COAT PROCESS
Phosphate +
Polyester Powder Coat



PERMACOAT PROCESS
Phosphate +
Epoxy Powder Coat +
Polyester Powder Coat

AEGIS II[®] XTREME

Pedestrian Ornamental Railing



PRIMARY APPLICATION

- Pedestrian Railing for Bridges

Engineered to meet AASHTO LRFD

Aegis II Xtreme is the obvious front-runner in strength and durability for decorative pedestrian bridge railing. With a dual ForeRunner rail and multi-layer coating, this pedestrian railing is unmatched in overall product performance. In addition, the manufactured design of Aegis II Xtreme allows for a simplistic installation that yields extreme project savings.

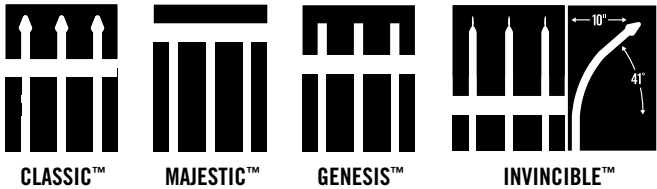
PICKETS	RAILS	POSTS	HEIGHTS
1" SQ. x 14 GA.	1.75" x 3.5" x 14 GA. DUAL FORERUNNER™ RAILS	4" SQ. x 11 GA.	3½', 4', 5', 6', 7' & 8'



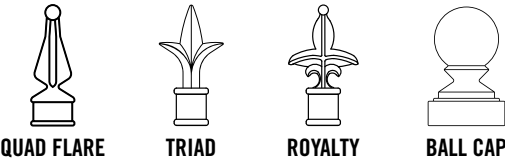
The innovative design of the Dual ForeRunner rail contains an internally secured galvanized retaining rod that allows for variable pitch connection, biasability and eliminates the need for visually unappealing external fasteners. Galvanized inside and out to protect against internal corrosion, the Dual ForeRunner rail is in the upper echelon of decorative railing options.



STYLES



ADORNMENTS



COLORS

Refer to color sample for actual color



Custom colors also available

AEGIS II[®]

Industrial Ornamental Steel Fence



The strength of Aegis II is rivaled only by the elegance of its profile. Manufactured as an industrial grade fence system, it is designed for strength and durability. Balanced by the beauty of its design features, Aegis II matches the level of security demanded by any application.

PRIMARY APPLICATIONS

- Stadiums & Event Centers
- Universities
- Airports
- Water Treatment & Storage
- Public Housing Authorities
- State Facilities
- Municipal Facilities
- Parks & Recreation
- Hospitals
- K-12 Schools

PICKETS

1" SQ. x 14 GA.

RAILS

1.75" x 1.75" x 14 GA.
FORERUNNER™ RAILS

POSTS

2.5" SQ. x 12 GA.
3" SQ. x 12 GA.

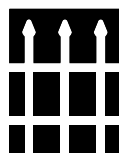
HEIGHTS

3', 3½', 4', 5', 6', 7', 8', 9', 10'
Custom heights also available



Aegis II gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

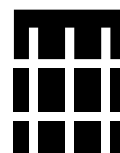
STYLES



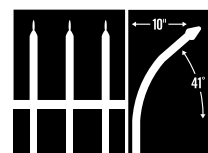
CLASSIC™



MAJESTIC™



GENESIS™



INVINCIBLE™

ADORNMENTS



QUAD FLARE



TRIAD



ROYALTY



BALL CAP



RING
(internally secured)

COLORS

Refer to color sample for actual color



BLACK



BRONZE



SAND



WHITE

Custom colors also available



AEGIS PLUS®

Commercial Ornamental Steel Fence



PRIMARY APPLICATIONS

- Municipal Facilities
- Self Storage
- Parks & Recreation
- Event Centers
- K-12 Schools
- Childcare Facilities

Aegis Plus combines strength greater than most commercial steel fences with a surface finish that is essentially maintenance-free. The size of Aegis Plus works well for numerous applications where users are seeking greater strength and a more substantial look without the high cost of industrial fencing.

PICKETS	RAILS	POSTS	HEIGHTS
.75" SQ. x 17 GA.	1.5" x 1.5" x 14 GA. FORERUNNER™ RAILS	2.5" SQ. x 12 GA.	3', 3½', 4', 5', 6', 7', 8' <i>Custom heights also available</i>

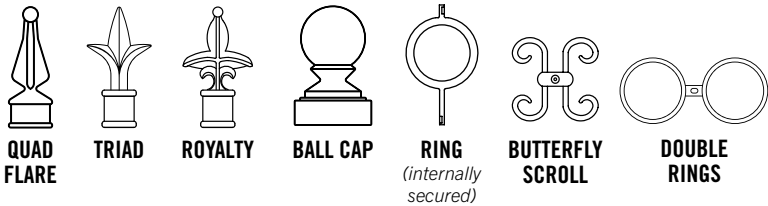


Aegis Plus gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

STYLES

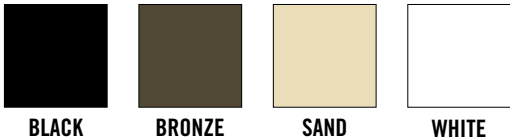


ADORNMENTS



COLORS

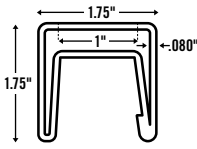
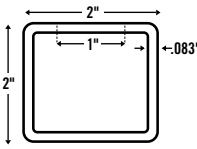
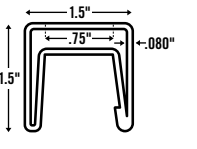
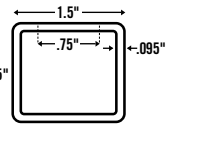
Refer to color sample for actual color



Custom colors also available

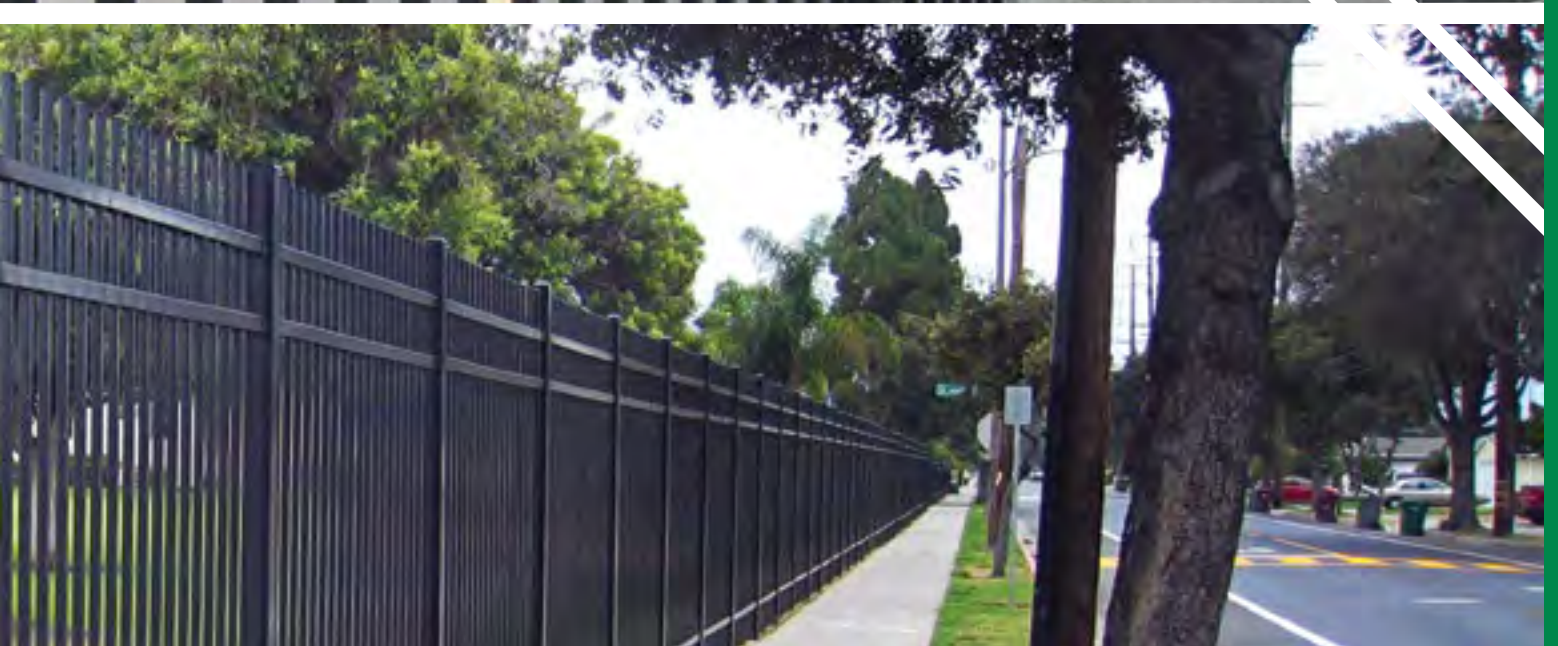
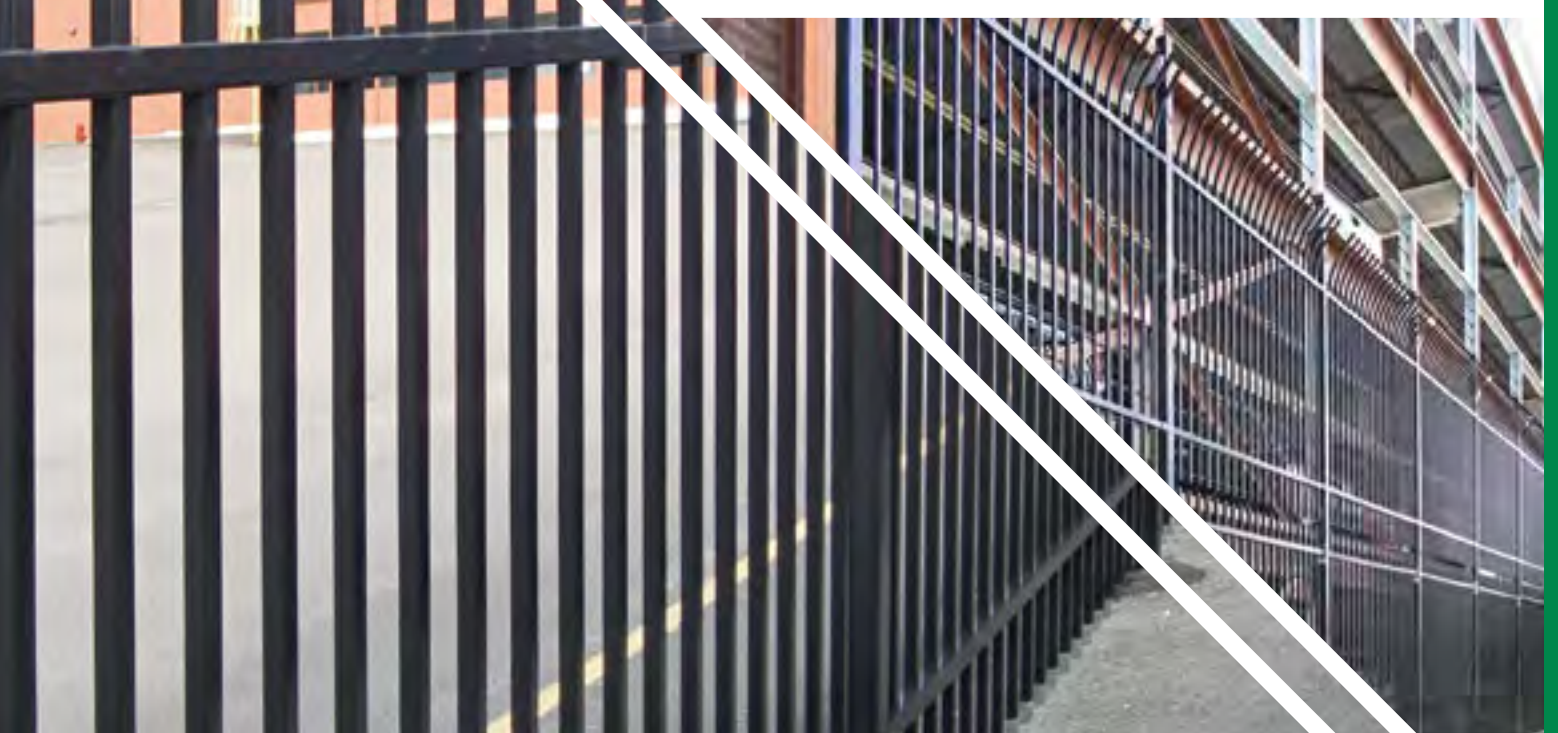


AEGIS STEEL RAIL STRENGTH COMPARISON

STRUCTURAL PARAMETERS		FORERUNNER™ AEGIS II®	SQUARE RAIL INDUSTRIAL	FORERUNNER™ AEGIS PLUS®	SQUARE RAIL COMMERCIAL
Architectural Profile of rail shape. Vertical Design Loads are per rail. <i>(For capacity of fence panel, multiply by number of rails)</i>					
T_{eff} = Effective Wall Thickness <i>(inches)</i>		.160	.083	.160	.095
S_v = Section Modulus <i>(inches vertical)</i>		.1624	.188	.1612	.115
S_h = Section Modulus <i>(inches horizontal)</i>		.367	.309	.254	.147
Vertical Load Data PV_f = Ultimate Vertical	6' span	676#	523#	652#	320#
	8' span	506#	392#	492#	239#
Horizontal Load Data PH_f = Ultimate Horizontal	6' span	1,020#	859#	639#	409#
	8' span	765#	644#	482#	306#
Vertical Load Data* PV_d = Vertical Design Load @ 66° F _y	6' span	446#	345#	430#	211#
	8' span	334#	259#	325#	158#
Horizontal Load Data* PH_d = Horizontal Design Load @ 66° F _y	6' span	673#	567#	422#	270#
	8' span	505#	425#	318#	202#

* Recommended load value for safe structural design / allowable strength = .66° F







ECHELON[®] PRODUCTS

**Internally Secured
Ornamental Aluminum Fence**

ECHELON II[®]
Industrial Ornamental Aluminum Fence

ECHELON PLUS[®]
Ornamental Aluminum Fence

*Echelon fence
systems are
protected to endure
the elements
and are
maintenance-free.*



*Echelon fence
systems are
backed by over
30 years of
excellence in the
fencing industry.*

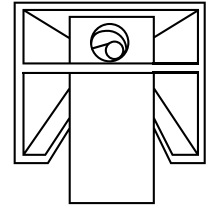


*Ameristar is
committed
to providing
products that
meet the Buy
American Act.*



FORERUNNER® LOCKING SYSTEM

Ameristar crafted the ForeRunner rail to increase strength through architecture. The innovative design of the ForeRunner rail contains an internally secured rod that allows for variable pitch connection, high angle biasability and eliminates the need for visually unappealing external fasteners.



Increased security

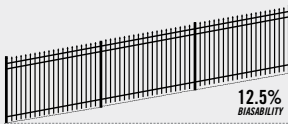
The ForeRunner Rail with internal retaining rod prevents the attachment from being compromised. Fasteners are not exposed.

Aesthetic details

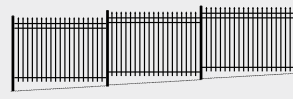
“Good Neighbor Design” rod follows ForeRunner centerline providing a clean and uninterrupted look, void of visible screws or rivets.

RAKEABLE VS STAIR-STEP

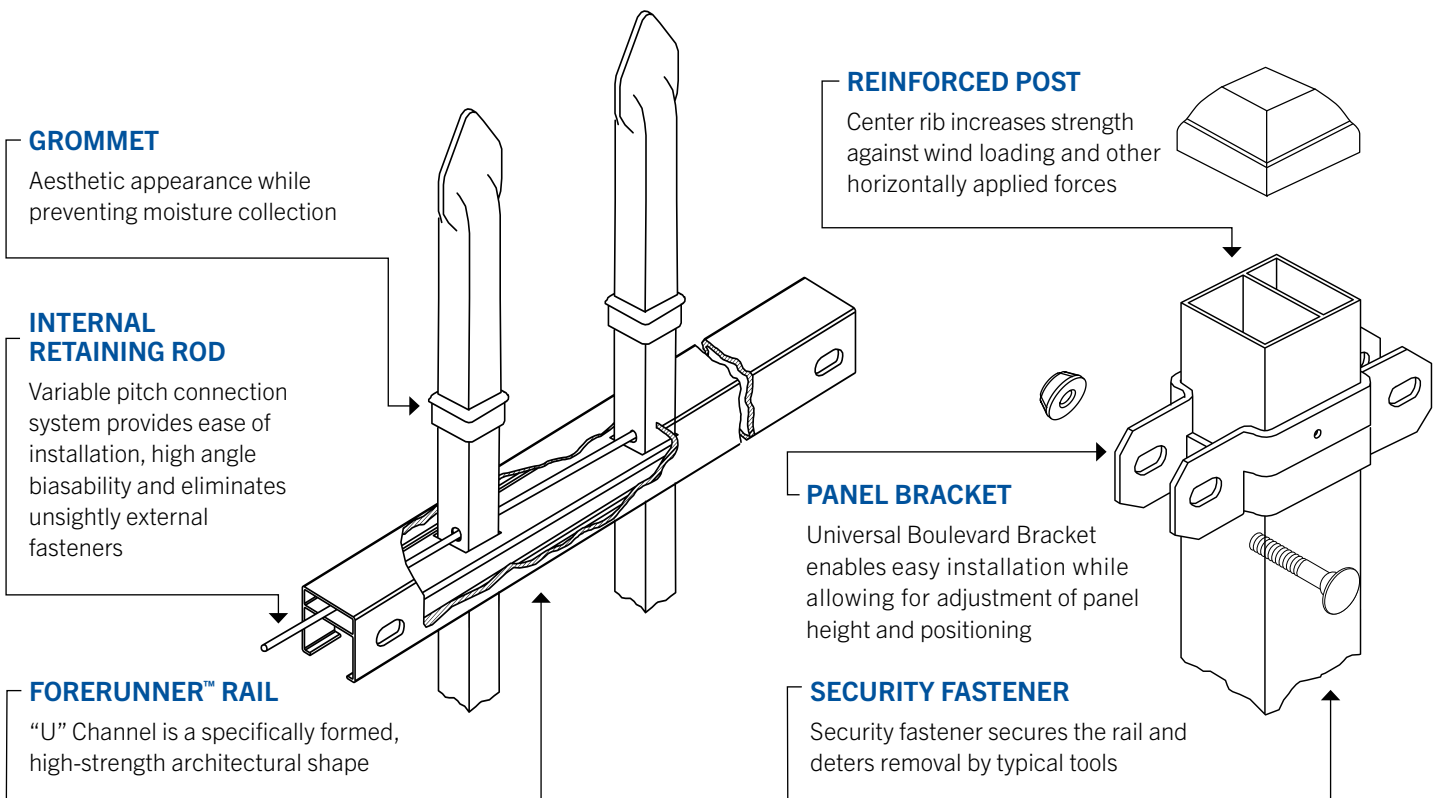
Having a unique picket to rail connection allows Echelon products a minimum biasability of 12.5%, eliminating any possible security risks due to large gaps under the fence panels.



FULLY RAKEABLE PANELS



STAIR-STEPPING PANELS



ECHELON II[®]

Industrial Ornamental Aluminum Fence



Echelon II's superior strength and durability is a result of combining top-quality design components with a maintenance-free, architectural grade finish. This revolutionary fence system is comprised of aluminum posts, panels, and mounting brackets that are easily installed along any terrain.

PRIMARY APPLICATIONS

- Water Treatment & Storage
- Public Housing Authorities
- State Facilities
- Stadiums & Event Centers
- Schools & Universities
- Municipal Facilities
- Airports
- Parks & Recreation
- Hospitals

PICKETS

1" SQ. x .062"

RAILS

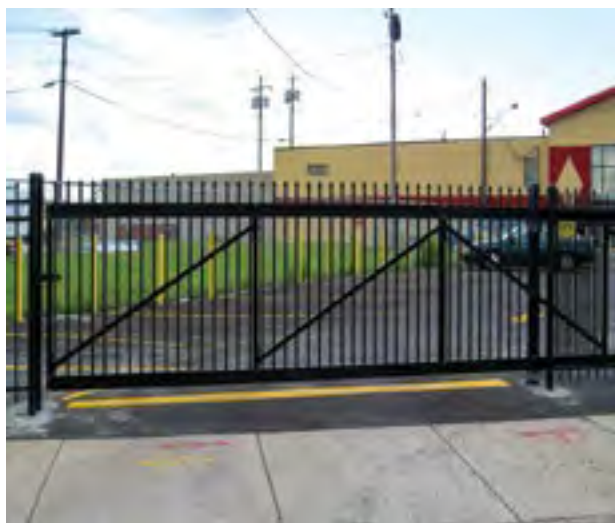
1.75" x 1.75" x (.070" SIDE & TOP WALL)
FORERUNNER™ RAILS

POSTS

2.5" SQ. x .080"
3" SQ. x .120"

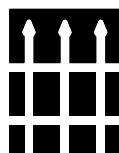
HEIGHTS

4', 5', 6', 7', 8', 9', 10'
Custom heights also available



Echelon II gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

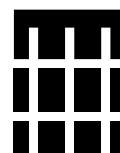
STYLES



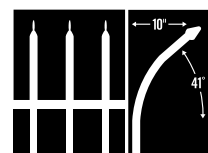
CLASSIC™



MAJESTIC™



GENESIS™



INVINCIBLE™

ADORNMENTS



QUAD FLARE



TRIAD



ROYALTY



BALL CAP



RING
(internally secured)

COLORS

Refer to color sample for actual color



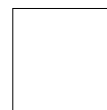
BLACK



BRONZE



SAND

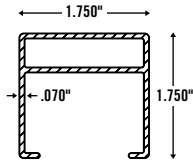
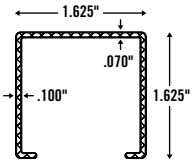


WHITE

Custom colors also available

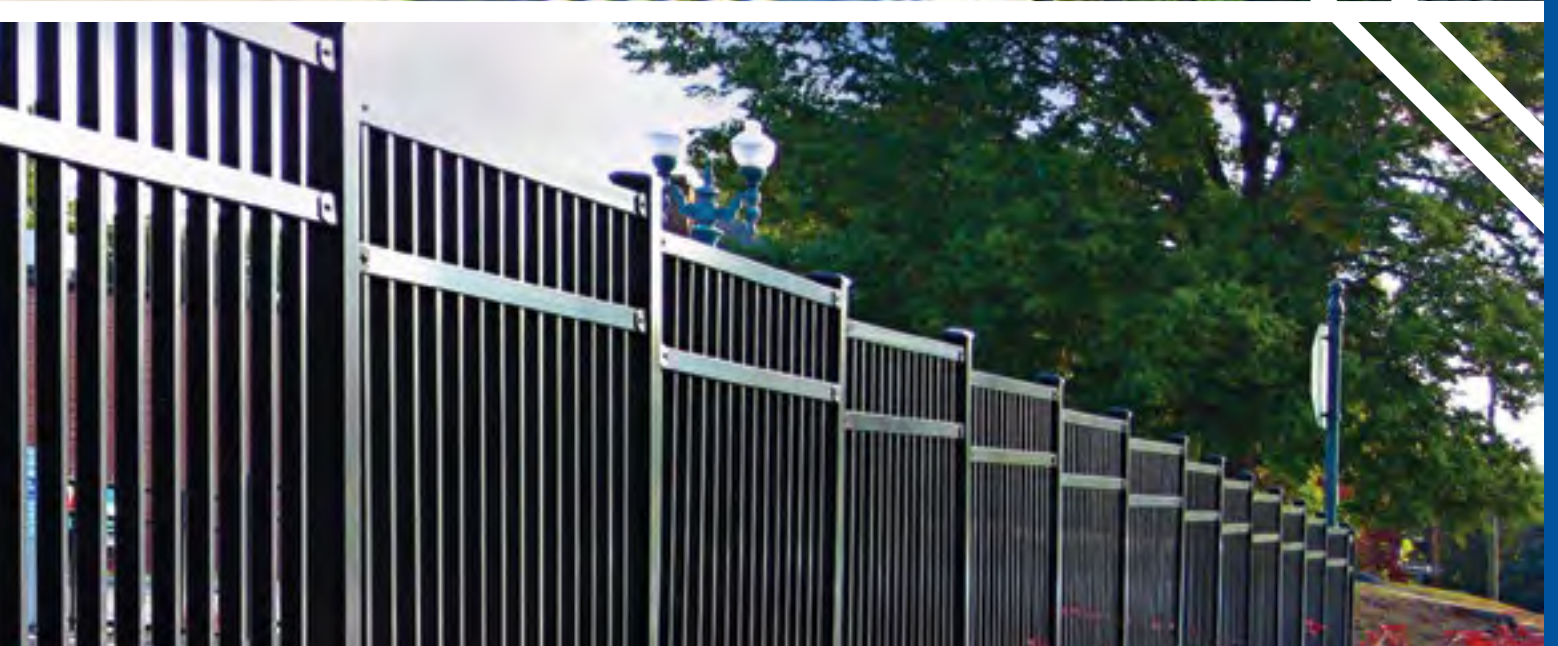


ECHELON II ALUMINUM RAIL STRENGTH COMPARISON

STRUCTURAL PARAMETERS		FORERUNNER™ ECHELON II	SQUARE RAIL INDUSTRIAL
Architectural Profile of rail shape. Vertical Design Loads are per rail. (For capacity of fence panel, multiply by number of rails)			
T_{eff} = Effective Wall Thickness (inches)		.070	.100 / .070
S_v = Section Modulus (inches vertical)		.125	.135
S_h = Section Modulus (inches horizontal)		.260	.260
Vertical Load Data PV_i = Ultimate Vertical	6' span	243#	262#
	8' span	182#	182#
Horizontal Load Data PH_i = Ultimate Horizontal	6' span	505#	499#
	8' span	379#	373#
Vertical Load Data* PV_d = Vertical Design Load @ 66° F _y	6' span	145#	145#
	8' span	109#	109#
Horizontal Load Data* PH_d = Horizontal Design Load @ 66° F _y	6' span	303#	299#
	8' span	227#	224#

* Recommended load value for safe structural design / allowable strength = .66° F





ECHELON PLUS®

Ornamental Aluminum Fence



PRIMARY APPLICATIONS

- Municipal Facilities
- Childcare Facilities
- Coastal Environments
- Parks & Recreation
- Schools

Echelon Plus has taken the quality and performance of aluminum ornamental fencing to a higher level. The strength characteristics of the reinforced rail and posts, coupled with a superior powder coat finish, make Echelon Plus the most durable .75" ornamental picket product on the market.

PICKETS	RAILS	POSTS	HEIGHTS
.75" SQ. x .045"	1.4375" x 1.25" x (.090" SIDE / .060" TOP) FORERUNNER RAILS	2.5" SQ. x .060"	3', 3½', 4', 4½', 5', 6' <i>Custom heights also available</i>



Echelon Plus gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

STYLES

CLASSIC™

MAJESTIC™

GENESIS™

CONQUEROR™

WARRIOR™

ADORNMENTS

QUAD FLARE

TRIAD

ROYALTY

BALL CAP

RING
(internally secured)

BUTTERFLY SCROLL

COLORS

Refer to color sample for actual color

BLACK

BRONZE

WHITE

Custom colors also available





IMPASSE II®

High Security Steel Palisade Fence



Developed by the US Department of Homeland Security, the SAFETY Act established a system of risk and litigation management for claims arising out of, relating to, or resulting from an act of terrorism.

Impasse II fence systems are protected to endure the elements and are maintenance-free.



Impasse II is backed by over 30 years of excellence in the fencing industry.



Ameristar is committed to providing products that meet the Buy American Act.



Ameristar products have the opportunity to earn LEED points.



DESIGN INTEGRATION

The Impasse II framework is a raceway for wiring, conduits, and/or security cabling required around the perimeter of a project. This integrated design eliminates the need for costly trenching and boring, becoming a value-added solution for perimeter security upgrades.

When installing these security elements use Impasse II as a platform:

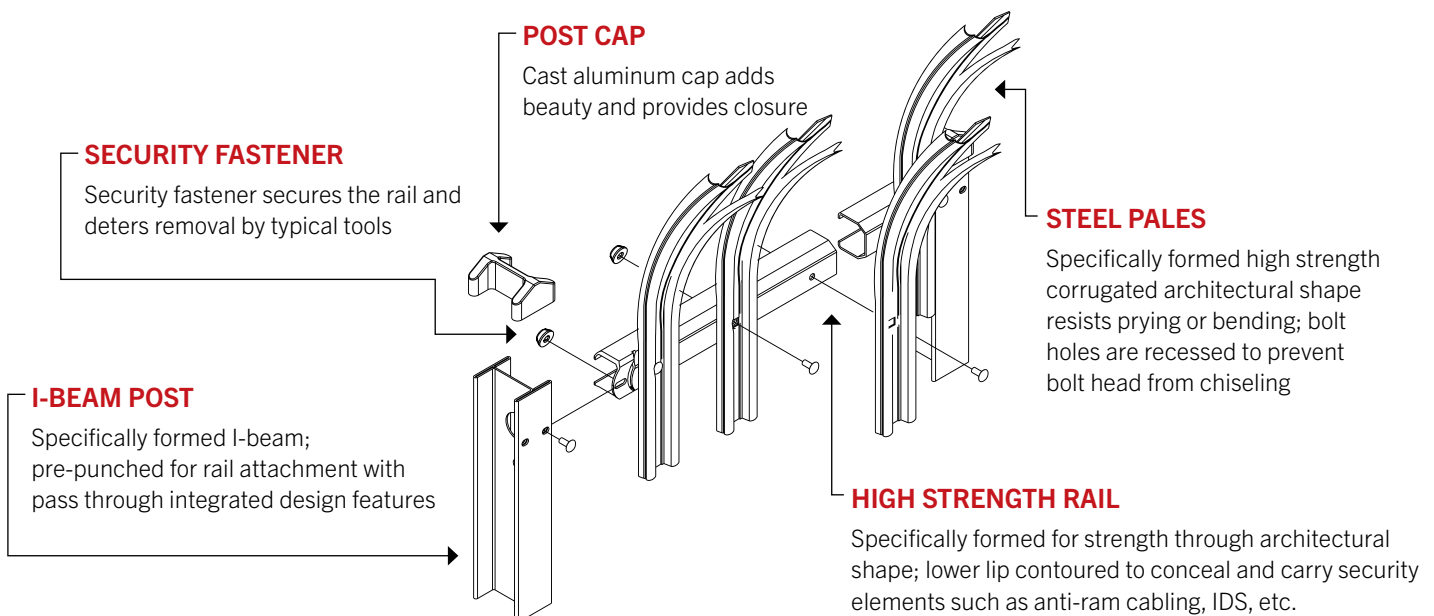
- Communication & Video Cables
- Access Control Wiring
- Intrusion Detection / Fiber Optic Cables
- Conduits
- Anti-Ram Cabling (Stalwart)



(Inside of rail shown above / view from protected side)

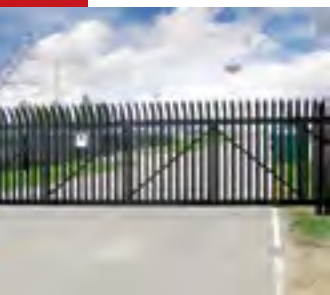
FABRICATION & DESIGN

- High-tensile Pre-Galvanized Steel
- Roll formed profiles yield significant system strength
- Design enables fence panels to follow terrain



IMPASSE II®

High Security Steel Palisade Fence

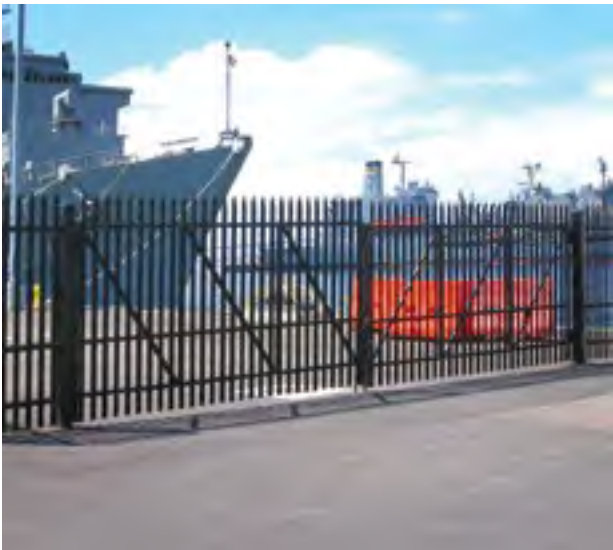


Maintaining a secure perimeter is your first line of defense against potential threats. Impasse II fence systems serve as a visual deterrent backed with heavy steel components that give a higher level of protection compared to the traditional chain link or architectural mesh fence alternatives.

PRIMARY APPLICATIONS

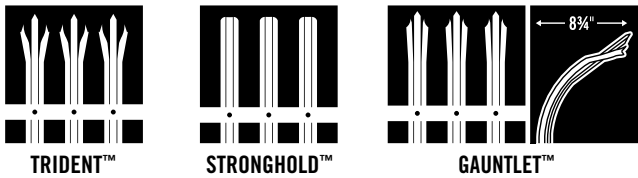
- Military Sites
- Government Facilities
- Petroleum & Chemical Facilities
- Power Plants & Substations
- Airports
- Data Centers
- Ports of Entry
- Water Treatment & Storage

PALES	RAILS	I-BEAM POSTS	HEIGHTS
2.75" W x 14 GA.	2" x 2" x 11 GA.	3" x 2.75" x 12 GA. 4" x 2.75" x 11 GA.	6', 7', 8', 9', 10'



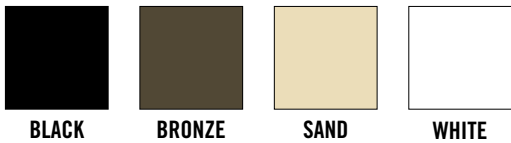
Impasse II gate options vary from swing gates for pedestrian or vehicle access to sliding gates for high-functioning points of entry. Each of these gate systems is individually constructed to provide project specific performance.

STYLES



COLORS

Refer to color sample for actual color



ANTI-SCALE OPTION

The Impasse II Anti-Scale fence system has decreased pale spacing, which deters climbing and delays those trying to cut or pry through the fence.





STALWART® PRODUCTS

Anti-Ram Vehicle Barriers

STALWART OPTIMA®
Fiber Rope Anti-Ram Barrier

STALWART®
Post & Rail Anti-Ram Crash Barrier

STALWART IS®
Anti-Ram Barrier + Security Fence

STALWART II®
Anti-Ram Barrier + Ornamental Fence

STALWART PLUS®
Anti-Ram Barrier + Architectural Mesh

*Stalwart systems
are protected
to endure the
elements
and are
maintenance-free.*



*Ameristar's fence
framework for
Stalwart is backed
by over 30 years
of excellence in the
fencing industry.*



*Ameristar is
committed
to providing
products that
meet the Buy
American Act.*



*Ameristar
products
have the
opportunity
to earn
LEED points.*



DESIGN INTEGRATION

The Stalwart framework is a raceway for wiring, conduits, and/or security cabling required around the perimeter of a project. This integrated design eliminates the need for costly trenching and boring, becoming a value-added solution for perimeter security upgrades.

Use the Stalwart framework as a platform for these security elements:

- Communication & Video Cables
- Access Control Wiring
- Intrusion Detection / Fiber Optic Cables
- Conduits
- Anti-Ram Cabling (Stalwart)



(Inside of rail shown above / view from protected side)



CRASH RATINGS

Stalwart offers multiple anti-ram ratings. Each installation can be designed with the most appropriate stand-off distance from the assets.

M50 M40 M30

PU60 PU50 PU30

K12 K8 K4



SAFETY ACT CERTIFIED

Developed by the US Department of Homeland Security, the SAFETY Act established a system of risk and litigation management for claims arising out of, relating to, or resulting from an act of terrorism.



STALWART OPTIMA®

Fiber Rope Anti-Ram Crash Barrier

Stalwart Optima Fiber Rope System redefines and sets the standard in vehicle crash protection for the 21st century. The inherently flexible and innovative design allows for multiple changes of direction with run lengths from 16' to 1,500' linear runs. A shallow footer design and simplified installation round out the innovations making Stalwart Optima the most cost-effective, economical, crash tested barrier system on the market today.

RAILS | 11" x 2.75" POSTS | 8" Diameter / 15" Set Depth

Minimum runs of 16' and greater

STALWART SYSTEMS PRIMARY APPLICATIONS

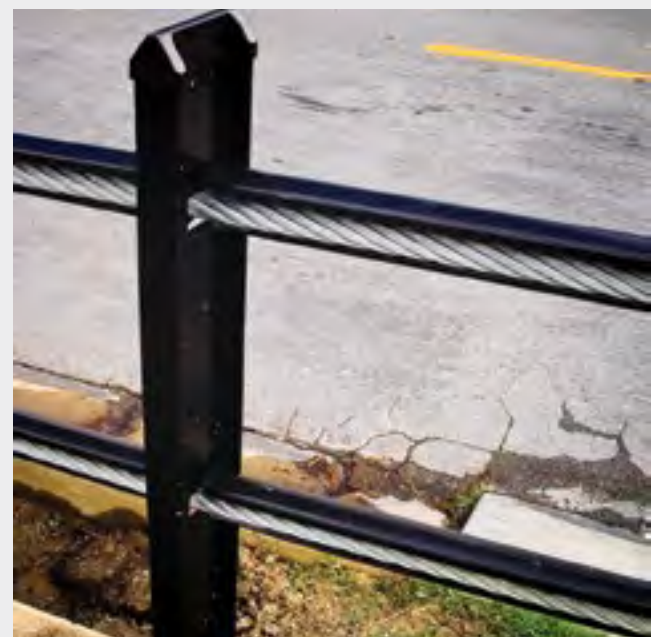
- Government Facilities
- State Facilities
- Military Sites
- Petroleum & Chemical Facilities
- Stadiums & Event Centers
- Schools & Universities

STALWART®

Post & Rail Anti-Ram Crash Barrier

The Stalwart post and rail anti-ram barrier is the most economical passive perimeter barrier on the market. The Stalwart standalone design, when installed adjacent to an existing perimeter fence, transforms the perimeter into a secure anti-crash perimeter system.

RAILS | 2" x 2" x 11 GA. I-BEAM POSTS | 3" x 2.75" x 12 GA.



STALWART IS[®]

Anti-Ram Barrier + Security Fence

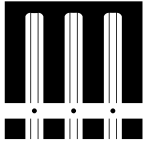
PALES | 2.75" x 14 GA. I-BEAM POSTS | 3" x 2.75" x 12 GA.

RAILS | 2" x 2" x 11 GA.

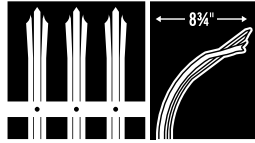
STYLE OPTIONS



TRIDENT™



STRONGHOLD™



GAUNTLET™



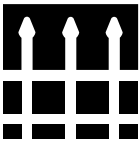
Stalwart IS unites the strongest security fence available with the most widely used anti-ram perimeter barrier. The appearance of Stalwart IS is a great visual deterrent that delivers strength and fortitude for keeping any assailant from easily breaching the perimeter.

STALWART II[®]

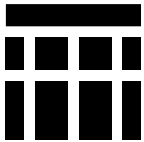
Anti-Ram Barrier + Ornamental Fence

RAILS | 2" x 2" x 11 GA. I-BEAM POSTS | 3" x 2.75" x 12 GA.

STYLE OPTIONS



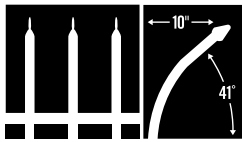
CLASSIC™



MAJESTIC™



GENESIS™



INVINCIBLE™



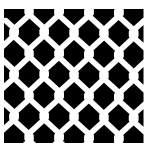
Stalwart II integrates the design features of a traditional ornamental iron fence with the resilience of the Stalwart anti-ram barrier. The ornamental picket design blends into its surroundings, not drawing attention to itself, but still maintaining the requirements of an anti-ram barrier.

STALWART PLUS[®]

Anti-Ram Barrier + Architectural Mesh

RAILS | 2" x 2" x 11 GA. I-BEAM POSTS | 3" x 2.75" x 12 GA.

STYLE OPTIONS



UPLINK™

Chain Link



X-SPAN™

Expanded Metal



WIREWORKS™

Welded Wire



Stalwart Plus combines the design components of an anti-ram barrier with the industrial appearance of architectural mesh. Diverse mesh options are available, providing varied levels of security with anti-cut and anti-climb properties.



WIREWOKS[®] PRODUCTS

Welded Wire Fence

WIREWOKS PLUS[®]

Commercial Welded Wire Steel Fence

WIREWOKS ANTI-CLIMB[®]

High Security Welded Wire Mesh Fence

Our polyester powder coated steel guarantees a maintenance-free and environmentally friendly fence.



WireWorks welded wire steel fence is backed by over 30 years of excellence in the fencing industry.



COLORS

Refer to color sample for actual color



BLACK



BRONZE



TUBE BROWN



GREEN



SAND



WHITE

DESIGN INTEGRATION

The WireWorks Anti-Climb framework is a raceway for wiring, conduits, and/or security cabling required around the perimeter of a project. This integrated design eliminates the need for costly trenching and boring, becoming a value-added solution for perimeter security upgrades.

When installing these security elements use WireWorks Anti-Climb as a platform:

- Communication & Video Cables
- Access Control Wiring
- Intrusion Detection / Fiber Optic Cables
- Conduits
- Anti-Ram Cabling (Stalwart)



(Inside of rail shown above / view from protected side)

FABRICATION & DESIGN

WireWorks is Ameristar's line of welded wire fence, perfect for projects that require full visibility. This fence system provides unobstructed visibility, aesthetics and security while delivering a value-added fencing solution.



WIREWOKS PLUS®

Commercial Welded Wire Steel Fence



WIRE PANELS

2" x 6" MESH / 6 GA. WIRE

V-FOLDS

2, 2, 3, 4
(4', 5', 6', 8' HEIGHTS RESPECTIVELY)

POSTS

2" SQ. x 16 GA.
2.5" SQ. x 16 GA.

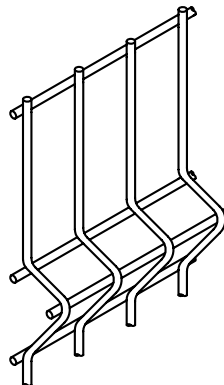
HEIGHTS

4', 5', 6', 8'

WireWorks Plus is the new standard in welded wire fencing

Each WireWorks Plus panel has been designed with a series of architectural "V" folds, vital to the overall reinforcement and strength of the welded wire fence system, providing:

- Unobstructed visibility
- Aesthetics
- Security



PRIMARY APPLICATIONS

- Commercial Developments
- Parking Facilities
- Self Storage
- Parks & Recreation
- Schools & Universities
- Apartments (Multi-Family)
- Amusement Parks
- Healthcare Facilities

WIREWOKS ANTI-CLIMB[®]

High Security Welded Wire Mesh Fence



WIRE PANELS

3" x .5" x 10.5 GA. (8')
3" x .5" x 8 GA. (10')

RAILS

2" SQ. x 11 GA. IMPASSE II

I-BEAM POSTS

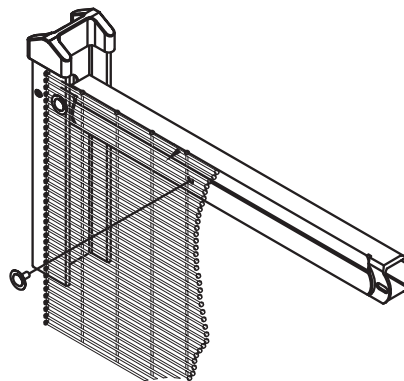
3" x 2.75" x 12 GA. (8')
4" x 2.75" x 12 GA. (10')

HEIGHTS

8' & 10'

WireWorks Anti-Climb is a unique perimeter security system that maintains visibility while also delaying and deterring an attack. The tightly fabricated welded wire mesh is designed to provide additional protection from intruders on multiple fronts:

- The wire mesh's tight spacing makes handholds and footholds virtually impossible.
- Minimal spacing between each welded wire strand makes it difficult to cut yet still provides increased visibility.
- This fence solution is groundable and meets IEEE standards.



PRIMARY APPLICATIONS

- Petroleum & Chemical Facilities
- Power Plants & Substations
- Manufacturing Plants
- Military Sites
- Government Facilities
- Airports
- Railway



MATRIX[®] PRODUCTS

High Security Perimeter
Enclosure Grid

MATRIX[®]

Mesh Infill System

MATRIX HARDENED[®]

Infill + Pale System

MATRIX ALPHA[®]

Curtain Wall System

*Matrix products
are protected to
endure the
elements and are
maintenance-free.*



*Matrix products are
backed by over 30
years of excellence
in the fencing
industry.*



*Ameristar is
committed to
providing products
that meet the Buy
American Act.*



DESIGN INTEGRATION

Serving as a raceway for wires and cabling, the Matrix framework creates a smart perimeter platform. The design eliminates the need for costly trenching and boring, saving money without compromising security.

Available on Matrix and Matrix Hardened

The framework houses:

- Communication & video cables
- Access control wiring
- Intrusion detection/fiber optic cables
- Conduits
- Anti-ram cabling



(Inside of rail shown above / view from protected side)



PRIMARY APPLICATIONS

- Power Utilities
- Petrochemicals
- Industrial Storages
- Waters and Wastewaters
- Data Storages
- Sally Ports
- Critical Infrastructures

This innovative fence solution expands to accommodate your level of required security. Multiple mesh options allow you to select the degree of delay and site visibility. Engineered for critical infrastructure, this system unites strength with versatility to protect any asset.

ENGINEERED SOLUTIONS

Designed as a layered solution, Matrix systems exceed expectations and meet strict security standards.



**CONFORMS TO IEEE
GROUNDING STANDARDS**



**MEETS ASTM F2781
FORCED ENTRY STANDARD**



**MEETS ASCE 7-10
EXPOSURE C WIND LOAD**



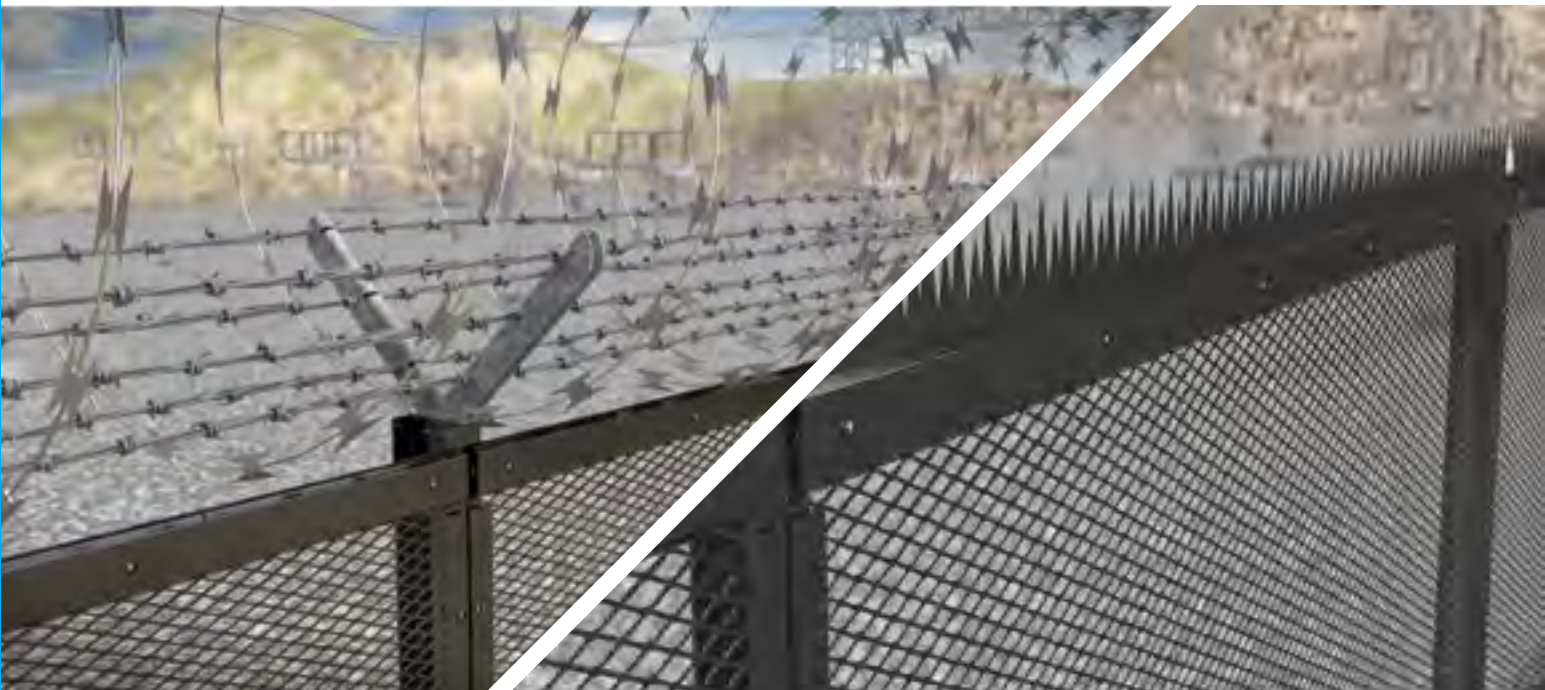
**EXPANDABLE TO MEET ASTM F2656
CRASH BARRIER STANDARD**

SYSTEM ENHANCEMENTS

Matrix product options to improve deterrence and increase delay.



- **ANIMAL MITIGATION SHIELD**
- **BARBED WIRE ARMS**
- **TECHNOLOGY POSTS**
- **SPIKE DETERRENT STRIPS**
- **ANTI BURROW** (not shown)
- **BALLISTIC PANELS** (UL 752 - Level 8)



MATRIX®

Mesh Infill System

With an expandable design, Matrix is built to accommodate multiple mesh infill options. Each infill possesses unique characteristics, allowing you to determine the level of visibility, delay and deterrence for your site.

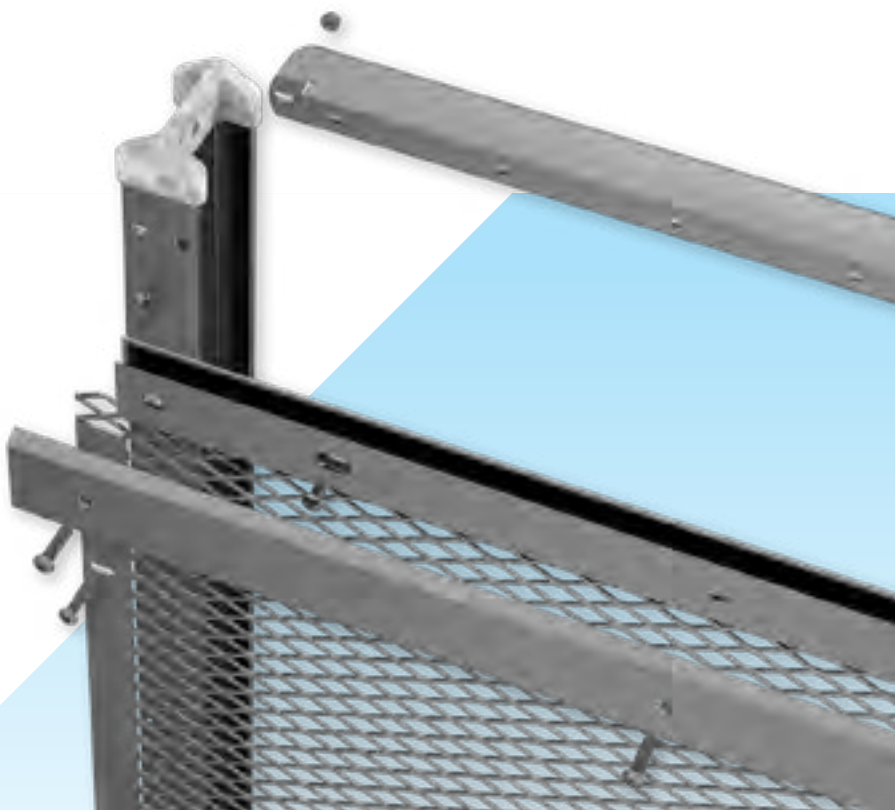
COLORS Refer to color sample for actual color



BLACK



GRAY



RAILS

2" x 11 GA. C-SHAPED

INFILL CHANNEL

3.5" x .75" ALUMINUM

DIRECT BURY/PLATED POSTS

I-BEAM/TANDEM I-BEAM POSTS
4" x 2.75" x 11 GA.
8" SQ. x .25 WALL

HEIGHTS

8'-8", 10'-8",
12'-9", 15'-7",
20'-10"



X-Span®

37%
OPACITY

.75" x #9F std. option



X-Span® Modified

75%
OPACITY

.5" x #13R (.188 strand) std. option



X-Screen®

94%
OPACITY

1.5" x #14 std. option



WireWorks® 8 GA.

36%
OPACITY

.5" x 3" x 8 GA. std. option
.5" x 3" x 6 GA. std. option

6 GA.

43%
OPACITY

MATRIX HARDENED®

Infill + Pale System

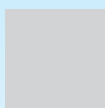
Matrix Hardened combines X-Span® mesh infill grid and Impasse pales to create a heavy-duty security system with increased delay times. Choose from Trident™, Stronghold™ or Gauntlet™.

COLORS

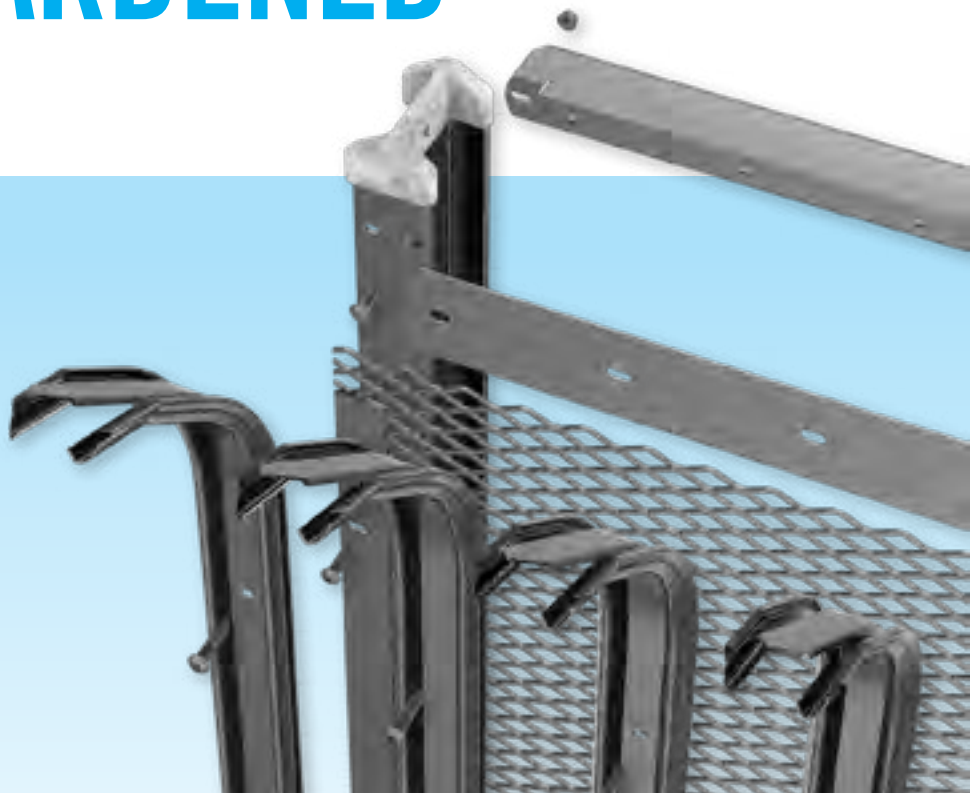
Refer to color sample for actual color



BLACK



GRAY



RAILS

2" x 11 GA. C-SHAPED

PALES

2.75" x 14 GA.

DIRECT BURY/PLATED POSTS

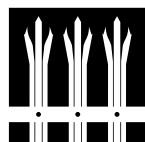
I-BEAM/TANDEM I-BEAM POSTS
4" x 2.75" x 11 GA.
8" SQ. x .25 WALL

HEIGHTS

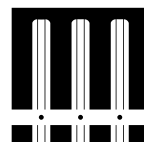
9'-9", 11'-9",
13'-10", 16'-10"



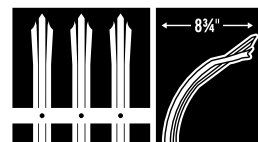
STYLE OPTIONS



TRIDENT™



STRONGHOLD™



GAUNTLET™



X-Span®

.75" x #9F std. option

PALE SPACING OPTIONS

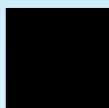
STANDARD SPACING:	3.25"	62% OPACITY
ANTI-SCALE SPACING:	1.5"	81% OPACITY

MATRIX ALPHA®

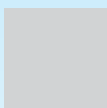
Curtain Wall System

Galvanized to protect from the elements, the Matrix Alpha fence system is a baseline for perimeter security. Alpha's curtain wall architecture allows for variable post spacing, yielding reduced installation times.

FINISHES Refer to color sample for actual color



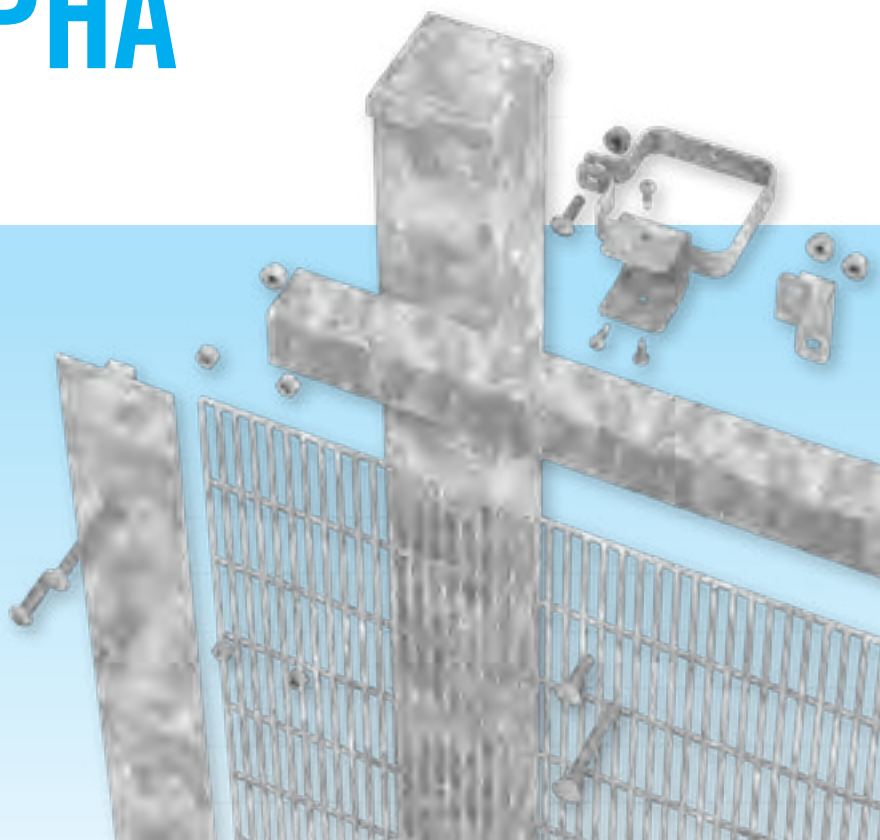
BLACK



GRAY



GALVANIZED



RAILS

2" x 16 GA.

RAIL TO INFILL BRACKET

1" x .125"

INFILL COVER

3.5" x .50" ALUMINUM

DIRECT BURY/PLATED POSTS

4" SQ. x 11 GA.

3" x 6" x 14 GA. & .1875" WALL

6" SQ. x .1875" WALL

HEIGHTS

7', 8', 9', 10', 11', 12',
13', 14', 15'

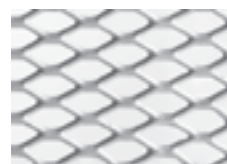
*Custom height options available.
Standard height options
available in ½' increments.*



X-Span®

37%
OPACITY

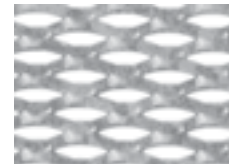
.75" x #9F std. option



X-Span® Ultra

36%
OPACITY

.5" x #13R Ultra & Modified (.188 strand)



Modified

75%
OPACITY



X-Screen®

94%
OPACITY

1.5" x #14 std. option



WireWorks® 8 GA.

36%
OPACITY

.5" x 3" x 8 GA. std. option
.5" x 3" x 6 GA. std. option

6 GA.

43%
OPACITY



GATES

Strength, durability and
proven functionality

EXODUS EGRESS

All-in-One Pedestrian Gate Systems

PASSPORT

Steel V-Track Roll Gate Design

TRANSPORT

Engineered Cantilever Gates

STYLES

- Classic
- Majestic
- Genesis
- Invincible
- Trident
- Stronghold
- Gauntlet

COLORS

Refer to color sample for actual color



BLACK



BRONZE



SAND



WHITE

Custom colors also available

EXODUS

Exodus Egress Gates come pre-installed with a specific hardware set. There are various hardware set options available; see product catalog for details. These hardware options include a gate closer, exit device and pull or trim handle set. Exodus Double gates include removable mullion posts and are only available in the flange mounting option.

Hardware set options available to meet California building code.



PASSPORT

Passport is an innovative roll gate system with a robust fabricated design. Its rigid framework enables the gate system to glide effortlessly across its on-grade track, and its V-Track design provides the least amount of space required for a slide gate system.

The reversible design of the PassPort roll gate insures a flawless installation by allowing the gate to be installed on either side of the gate opening.



TRANSPORT

TransPort is a revolutionary cantilever gate system made up of three components: frame, facade and hardware.

The component design decreases the risk of damage during transit and does not require a team of installers or machinery to install the gate system. The cantilever gate can easily be installed with a standard three-man crew in about two hours.



EXODUS[®] EGRESS

All-in-One Pedestrian Gate System



The Exodus Egress all-in-one gate system includes pre-installed hardware and is available in both Single and Double gate models. The non-removable pins and power transfer components produce a secure gate more capable of restricting vandalism and forced entry.

Designed for full functionality out-of-the-box, the Exodus Egress gate combines frame, gate and hardware into a complete system that is plug and play ready.

PRIMARY APPLICATIONS

- K-12 Education
- Higher Education
- Stadiums & Arenas
- Municipal Facilities
- Data Centers
- Power Utility
- Retail Outlets
- Apartments
- Assisted Living



**MEETS IBC
CODE**



**INSTALLS
IN MINUTES**



**SHIPPED COMPLETELY
ASSEMBLED**



**MULTIPLE DESIGN
OPTIONS**

Exodus Egress Gates come pre-installed with a specific hardware set. There are various hardware set options available; see product catalog for details. These hardware options include a gate closer, exit device and pull or trim handle set. Exodus Double gates include removable mullion posts and are only available in the flange mounting option.

Hardware set options available to meet California building code.



FEATURES

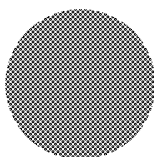
- Pre-installed panic hardware
- 18 hardware set options
- Pre-hung gate assembly
- 3 mounting options
- Left- or right-hand swing
- Removable threshold
- Multiple infill options

INTEGRATIONS

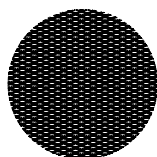
- Montage II
- Aegis II
- Impasse II
- Matrix
- Matrix Hardened
- Matrix Alpha

INFILLS

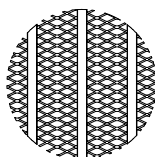
Various infills and hardware available. Some options not shown.



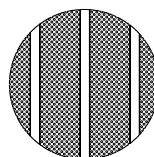
**PERFORATED
METAL**



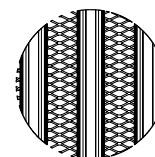
**X-SPAN
MODIFIED**



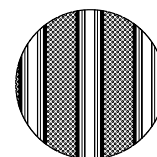
**1" PICKET WITH
EXPANDED METAL**



**1" PICKET WITH
PERFORATED METAL**



**IMPASSE PALE WITH
EXPANDED METAL**
Anti-Scale available



**IMPASSE PALE WITH
PERFORATED METAL**
Anti-Scale available

MOUNTING

Single Mounting Options

- Flange
- Plated
- Direct Bury

Double Mounting Options

- Flange

COLORS

Refer to color sample for actual color



BLACK



BRONZE



SAND

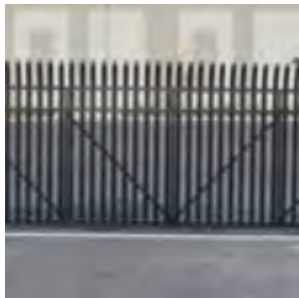
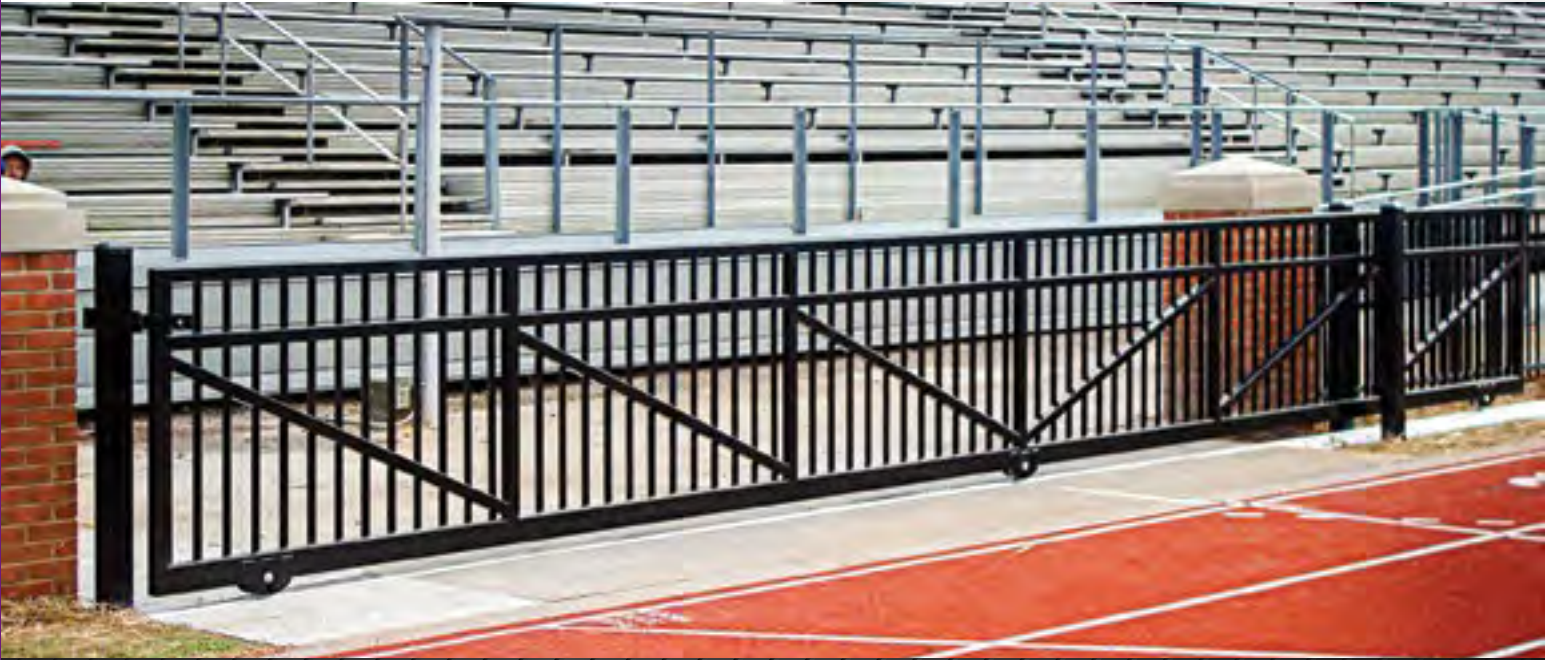


GREY

PASSPORT®

Steel V-Track Roll Gates

2" SQ. x 12 GA. uprights & diagonal braces
2" x 4" x 11 GA. bottom rail
(notched & plated for v-track wheels)



PASSPORT COMMERCIAL

Matches: Montage Plus, Montage Commercial & Aegis Plus

PASSPORT II

Matches: Montage II & Aegis II

PASSPORT IS

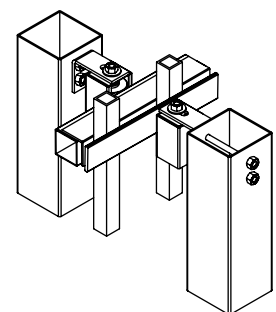
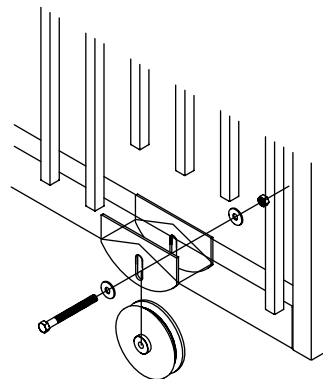
Matches: Impasse II

PRIMARY APPLICATIONS

- Water Treatment & Storage
- Municipal Facilities
- Government Facilities
- Airports
- Manufacturing Plants
- Petro & Chemical Facilities
- Power Plants & Substations
- Schools & Universities
- Stadiums & Event Centers

PASSPORT GATE HARDWARE

The PassPort roll gate design has been matched with equally superior hardware. The v-track rollers are designed to support more than the recommended load, and provide an effortless balance that glides smoothly across its gating opening.



TRANSPORT®

Engineered Cantilever Gates

2" SQ. x .25" wall uprights & diagonal braces
5" x 2" Fast-Trak



TRANSPORT II

Matches: Montage II, Echelon II & Aegis II

TRANSPORT IS

Matches: Impasse II

TRANSPORT ESTATE

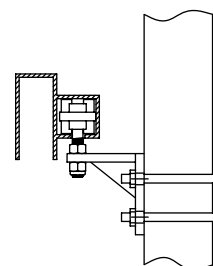
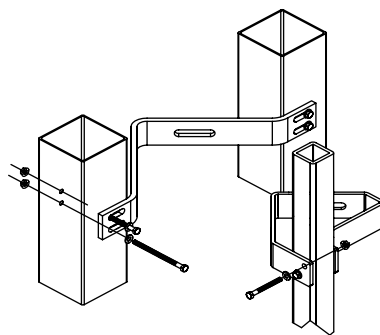
Matches: Aluminum Estate Entry Gates

TRANSPORT LINK

Matches: Chain link fence design

TRANSPORT GATE HARDWARE

Unlike other engineered cantilever gates, Transport gates greater than 24' openings come equipped with 4 internal trollies that distribute the weight of the gate as it is opened and closed.



PRIMARY APPLICATIONS

- K-12 Education
- Higher Education
- Stadiums & Arenas
- Municipal Facilities
- Data Centers
- Power Utility
- Retail Outlets
- Apartments
- Assisted Living



BOLLARDS & BARRIERS

Perimeter Security Products

BOLLARDS

Fixed, Removable and
Retractable (automated or manual)

BARRIERS

Vehicle Wedges, Beams, Drop Arm,
and Manual Gate

Refer to Bollards & Barriers Guide
for more in-depth information



AMERISTAR®
SECURITY PRODUCTS



BOLLARDS

Ameristar's line of fixed, retractable and removable security bollards are available in a variety of styles and crash ratings to fit your project's needs.



FIXED BOLLARDS

BULWARK

- M30/P1 *single bollard*
- M30/P2 *three bollard array*
- Eng. M50/P1 *single bollard*

DS22

- K12/L3 *three bollard array*

DS25

- K4/L3 *three bollard array*

GLADIATOR

- M50/P1 *five bollard array*

SP1000

- M40/P2 *equivalent*
- PAS68 *tested - three bollard array*

SMB

- K4/L3 *single bollard*

RETRACTABLE BOLLARDS

SP100

- PU30/P2 *equivalent*
- PAS68 *tested at 7700lbs - single bollard*

TITAN

- K12/L3 *three bollard array*

DEFENDER

- K4/L2 *three bollard array*

SP1000

- M50/P1 *single bollard*

BARRIERS

Ameristar's line of crash-tested barriers offers exceptional security and access control to defend your facility against vehicular threats.



- Engineered Solutions Available
- Custom HPU enclosures available (i.e. color, climate controlled, ballistic, etc.)
- HPU with weather resistant enclosures
- Access Control Integration
- Cold Weather Kits

ACTIVE BARRIERS

PATRIOT - Rising Beam

- M50/P1

SENTINEL - Vehicle Wedge

- K12/L3

M530 - Drop Arm

- M30/P1

CITYSCAPE - Manual Gate

- M40/P2 *equivalent*



Why Choose Ameristar?

KNOWLEDGE AND EXPERIENCE

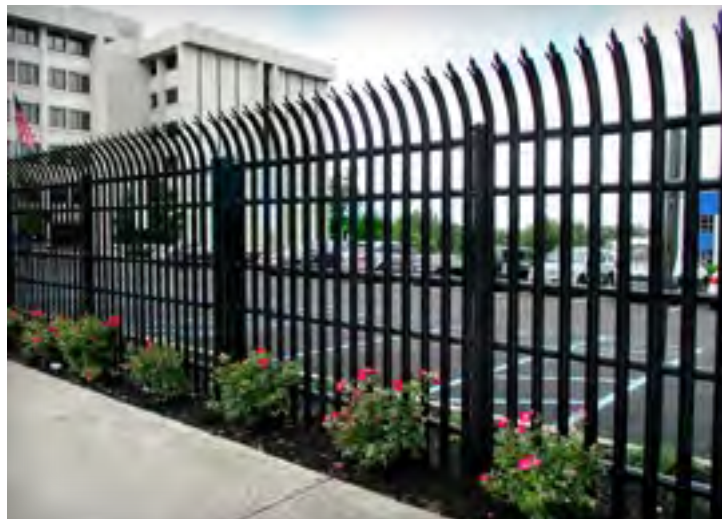
For over 30 years we've delivered aesthetically pleasing, high-quality and innovative fencing products with superior design strength and easy installation.

PROVEN CAPABILITIES

Our integrated in-house processes, extensive raw materials and finished goods inventory translate into quality, on-time delivery.

INDUSTRY LEADERSHIP

We continually raise the bar in manufacturing customer-focused solutions. Our high standards produce premium products that go beyond merely meeting minimum industry standards.



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AMERISTAR®
ASSA ABLOY