HIGH SECURITY PERIMETER ENCLOSURE GRID
Security demands are increasing.
Traditional fencing can’t keep up,
but Ameristar’s Matrix Systems can.
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.

**PRIMARY APPLICATIONS:**
- Power Utility
- Petrochemical
- Industrial Storage
- Water and Wastewater
- Data Storage
- Sally Ports
- Critical Infrastructure
MESH INFILL SYSTEMS

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.

RAILS: 2" x 11ga C-Shaped

INFILL CHANNEL: 3.5" x .75" Aluminum

DIRECT BURY AND PLATED POSTS:
- I-Beam and Tandem I-Beam Posts: 4" x 2.75" x 11ga
- 8" sq x .25 wall

X-Span®

.75" x #9F std. option
Expanded metal steel mesh provides modest delay to cut-through threats.

X-Span® Modified

.5" x #13R (.188 strand) std. option
Modified Expanded metal steel mesh provides superior delay to cut-through threats as well as ample visual screening.
X-Screen®

1.5” x #14 std. option

Louvered steel mesh provides favorable delay to cut-through threats and maximum visual screening.

Welded Wire steel mesh provides ample delay to cut-through threats and modest visual screening.

PERMACOAT FINISH OPTIONS

Available in black or gray

BALLISTIC PANEL OPTIONS

Also available (UL 752 - Level 8)
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™.

RAILS: 2” x 11ga C-Shaped
PALES: 2.75” w x 14ga

DIRECT BURY AND PLATED POSTS:
- I-Beam and Tandem I-Beam Posts: 4” x 2.75” x 11ga
- 8” sq x .25 wall

X-Span® Mesh

.75” x #9F std. option
Expanded metal steel mesh provides modest delay to cut-through threats.

PALE SPACING OPTIONS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD SPACING:</td>
<td></td>
</tr>
<tr>
<td>3.25”</td>
<td>62% OPACITY</td>
</tr>
<tr>
<td>ANTI-SCALE SPACING:</td>
<td>1.5”</td>
</tr>
<tr>
<td>81% OPACITY</td>
<td></td>
</tr>
</tbody>
</table>
HEIGHT OPTIONS
16’-10” height also available (not shown)

PERMACOAT FINISH OPTIONS
Available in black or gray

Trident™
Trident pales terminate in a menacing triple-pointed splayed spear tip. The intimidating look of the Trident corrugated pale is a visual deterrent to any who would dare to intrude.

Stronghold™
The blunt, slightly rounded tip of Stronghold offers strength when necessary, while providing safety and security to the public. Features the same structural configurations of its high-security counterparts.

Gauntlet™
The Gauntlet design rises above the topmost rail with an outward curve and terminates with a triple-pointed splayed spear tip. The outward curved pales discourage attempts to gain access by would-be intruders.
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.

**RAILS:** 2” x 16ga  
**INFILL COVER:** 3.5” x .50” Aluminum  
**RAIL TO INFILL BRACKET:** 1” x .125”

**DIRECT BURY AND PLATED POSTS:**  
- 3” x 6” x .083” wall and .1875” wall  
- 6” sq x .1875” wall

**X-Span® HDG only**  
.75” x #9F std. option  
Expanded metal steel mesh provides modest delay to cut-through threats.

**X-Span® Ultra**  
.5” x #13R Ultra & Modified (.188 strand)  
Expanded metal steel mesh provides superior delay to cut-through threats as well as ample visual screening.
HEIGHT OPTIONS
7’ through 15’ height available (6” increments)

PERMACOAT FINISH OPTIONS
Available in black or gray

GALVANIZED FINISH OPTION
HDG (Hot-Dip Galvanized)

X-Screen® HDG only
1.5” x #14 std. option
Louvered steel mesh provides favorable delay to cut-through threats and maximum visual screening.

WireWorks® 8ga
.5” x 3” x 8ga & 6ga std. option
Welded Wire steel mesh provides ample delay to cut-through threats and modest visual screening.
The electrostatic application in the PermaCoat® powder coating system results in coated surfaces with unmatched performance. The base coat of epoxy powder far surpasses the corrosion resisting abilities of painted surfaces. The “no-mar” polyester powder top coat reduces scratches and burnishing marks normally encountered during shipping and installation.

**COLOR OPTIONS**
Available in black or gray

**PERMACOAT LAYERS OF DEFENSE**

- Zinc Phosphate
- Zinc Rich Epoxy Powder Coat
- “No-Mar” Polyester Color Coat
- Galvanized Steel
**Matrix High Security Perimeter Enclosure Grid**

**Pre-treatment**

1. **Alkaline Wash**
   - Cleans metal

2. **Fixidine Rinse**
   - Rinses excess alkali

3. **Phosphate Rinse**
   - Corrosion resistant layer

4. **Clear Water Rinse**
   - Prep wash

5. **Non-Chromate Seal**
   - Moisture barrier

6. **Clear Water Rinse**
   - Final wash

7. **Drying Oven**
   - Eliminates all moisture

**Double-Coating**

8. **Epoxy Powder Coat**
   - Electrostatically applied

9. **Epoxy Gel Oven**
   - Gelled and cured

10. **Polyester Powder**
    - Electrostatically applied

11. **Finish Curing Oven**
    - Seals finish

**Corrosion Testing**

Corrosion occurs more easily without proper protection and process, which is why Ameristar’s coatings continue to outperform the competition as tested to ASTM B117 standards.

**3,500 Hours**

**Permacoat Process**

- Phosphate + Epoxy Powder Coat + Polyester Powder Coat

**Galvanized Coating**

Continuous hot-dip galvanized coating

**Galvanized ✔ Matrix Alpha**

For over a century galvanized finishes have been the baseline for protecting industrial fences from the elements. Since Ameristar’s inception, chain link fence framework has been a staple within our daily manufacturing production.

We apply our manufacturing expertise related to framework to providing galvanized engineered profiles of the highest quality. Ameristar quality is defined by our adherence to industry standards and the proven performance of our durable galvanized finishes.

**ASTM A123**

- Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

**ASTM A653**

- Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Ally Coated (Galvannealed) by the Hot-Dip Process
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
SMART FRAMEWORK

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

MEETS ASCE 7-10 EXPOSURE C WIND LOAD

EXPANDABLE TO MEET ASTM F2656 CRASH BARRIER STANDARD
SYSTEM ENHANCEMENTS
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)
Egress and ingress requirements are unique to each application. Managing traffic flow and usage demands are of the utmost importance, which is why Matrix gate systems are manufactured in a variety of types built to balance function and security.

Ameristar’s Exodus pedestrian egress gates, swing gates and sliding gates perfectly match the perimeter to create a seamless design while exuding a commanding presence of security built to unite perimeter and entry.
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.