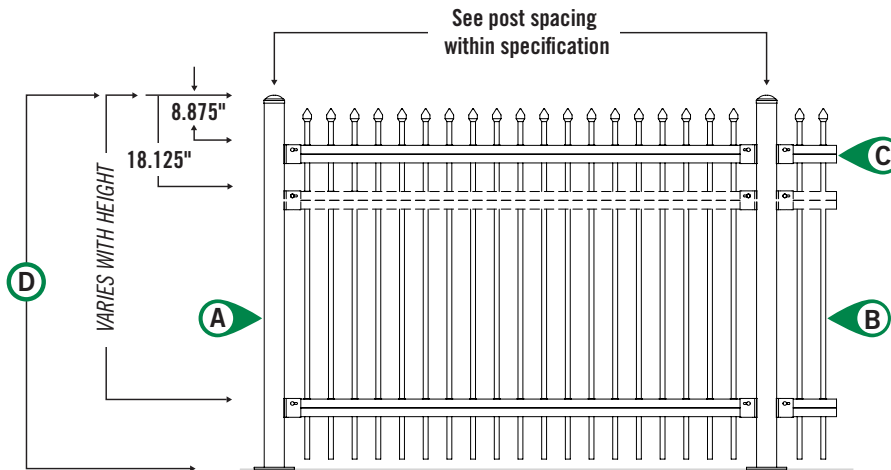


AEGIS II® XTREME | 2 & 3-RAIL OPTIONS | 4" AIR-SPACE

STANDARD BOTTOM OPTION



Classic panel shown

- Ⓐ 4"sq x 11ga PLATED POSTS
- Ⓑ 1"sq x 14ga PICKETS
- Ⓒ 1.75" x 3.5" x 14ga ForeRunner Xtreme RAILS
- Ⓓ 3½', 4', 5', 6', 7' & 8' PANEL HEIGHTS

PANELS REQUIRE ASSEMBLY

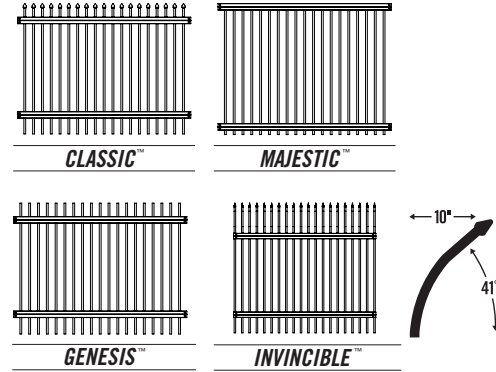
Refer to construction specification & tables within this section for recommended post spacing by bracket type

Effective: 08/01/18

AEGIS II® XTREME | 2-RAIL PANELS | 8' PANEL LENGTH

STANDARD BOTTOM | 8' PANEL LENGTH (92.625"/91.25"† actual width) | 19 / 20† PICKETS PER PANEL | ASSEMBLY REQUIRED

PANEL	ITEM NUMBER	WEIGHT	STOCKING
3.5'	X2☒☒20408	128 lbs	☉
4'	X2☒☒20468	136 lbs	☉
5'	X2☒☒20588	153 lbs	☉
6'	X2☒☒20708	171 lbs	☉
7'	X2☒☒20828	187 / 193†	☉
8'	X2☒☒20948	204 / 212†	☉



☒ = FENCE STYLES AVAILABLE | **C** = Classic **M** = Majestic **G** = Genesis
I = Invincible†

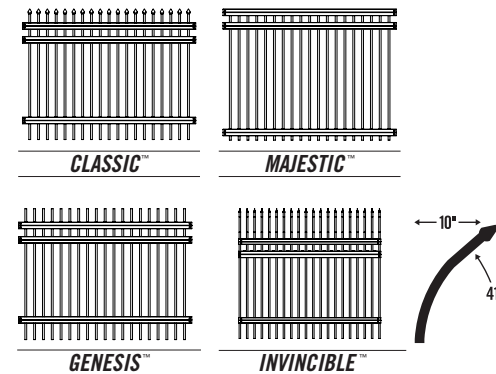
☒ = COLOR OPTIONS AVAILABLE | **B** = Black **N** = Bronze **W** = White
S = Sand

☉ = NON-STOCKED PRODUCT
 For details, see Ameristar's Sales Policy in the catalog guide.

AEGIS II® XTREME | 3-RAIL PANELS | 8' PANEL LENGTH

STANDARD BOTTOM | 8' PANEL LENGTH (92.625"/91.25"† actual width) | 19 / 20† PICKETS PER PANEL | ASSEMBLY REQUIRED

PANEL	ITEM NUMBER	WEIGHT	STOCKING
3.5'	X2☒☒☒30408	160 lbs	☉
4'	X2☒☒☒30468	168 lbs	☉
5'	X2☒☒☒30588	185 lbs	☉
6'	X2☒☒☒30708	202 lbs	☉
7'	X2☒☒☒30828	219 / 225†	☉
8'	X2☒☒☒30948	236 / 244†	☉



☒ = FENCE STYLES AVAILABLE | **C** = Classic **M** = Majestic **G** = Genesis
I = Invincible†

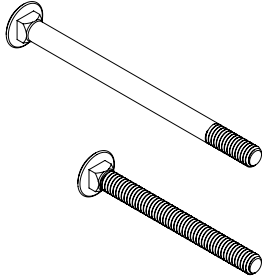
☒ = COLOR OPTIONS AVAILABLE | **B** = Black **N** = Bronze **W** = White
S = Sand

☉ = NON-STOCKED PRODUCT
 For details, see Ameristar's Sales Policy in the catalog guide.

Effective: 08/01/18

AEGIS II® XTREME | FASTENERS

AVAILABLE IN BOX QUANTITIES ONLY



DESCRIPTION	ITEM	ITEM NUMBER	WEIGHT	BAG QTY
Carriage Bolts	3/8" - 16 x 5.440"	2-0081-1P-20	3.8 lbs	20
	3/8" - 16 x 6.281"	2-0082-1P-20	4.4 lbs	20
	3/8" - 16 x 7.125"	2-0084-1P-20	4.8 lbs	20
	5/16" x 3"	HB549P-20	1.4 lbs	20
	5/16" x 3.25"	2-0083-1P-20	1.4 lbs	20

Stainless Steel Carriage Bolts Black



Flange Nuts	.375"	3-0039-1P-20	.4 lbs	20
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Tri Groove Security Nuts	.3125"	3-0032-1P-20	.3 lbs	20
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Fastener Socket	Tri-Groove	6-0058	.06 lbs	1
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Tamper-proof fasteners require socket for installation

AEGIS II® XTREME | FINIALS

FINIALS & PICKET PLUGS FOR GENESIS PANELS ONLY



QUAD FLARE
 1" / .5 lbs
 A⊗ 512



TRIAD
 1" / .5 lbs
 A⊗ 514



ROYALTY
 1" / .26 lbs
 A⊗ 526

1" PRESS FIT PICKET FINIALS

» 19 finials required per 8' panel

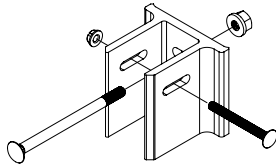
⊗ = **COLOR OPTIONS AVAILABLE** | **B** = Black **N** = Bronze
W = White **S** = Sand

*NOTE: Picket plugs are available in bag quantities only / 19 plugs per bag.
 Item number: 8450P-20 = **B** / 8453P = **W***

Effective: 08/01/18

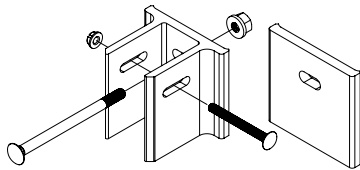
AEGIS II® XTREME | BRACKETS

AVAILABLE IN BAG QUANTITIES ONLY



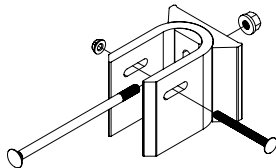
DESCRIPTION	ITEM NUMBER	ITEM # QTY	WEIGHT
Line Bracket Kit - 2 Rail System	AX⊗2L	4	5.50 lbs
Line Bracket Kit - 3 Rail System	AX⊗3L	6	8.25 lbs
Line Bracket Kit - Individual	AX⊗LB	1	1.46 lbs

Below Item qtys based on bracket system: 2 Rail System qty of 4 each - 3 rail system qty of 6 each - Individual qty of 1 each
 Ft. Mnt. Brkt | 3/8" x 5.44" & 5/16" x 3" Carriage Bolt | 3/8" Flange Nut | 5/16" Tri-Groove Security Nut



End Bracket - 2 Rail System	AX⊗2E	2	4 lbs
End Bracket - 3 Rail System	AX⊗3E	3	6 lbs
End Bracket Kit - Individual	AX⊗EB	1	2 lbs

Below Item qtys based on bracket system: 2 Rail System qty of 2 each - 3 rail system qty of 3 each - Individual qty of 1 each
 Ft. Mnt. Brkt | 3/8" x 5.44" & 5/16" x 3" Carriage Bolt | 3/8" Flange Nut | 5/16" Tri-Groove Security Nut | End Plate Brkt



Swivel Bracket - 2 Rail System	AX⊗2S	2	5.97 lbs
Swivel Bracket - 3 Rail System	AX⊗3S	3	8.95 lbs
Swivel Bracket Kit - Individual	AX⊗SB	1	2.95 lbs

Below Item qtys based on bracket system: 2 Rail System qty of 2 each - 3 rail system qty of 3 each - Individual qty of 1 each
 Swivel Brkt, Base & Washer | 3/8" x 6.281", 3/8" x 7.125", & 5/16" x 3.25" Carriage Bolt | 3/8" Flange Nut | 5/16" Tri-Groove Security Nut

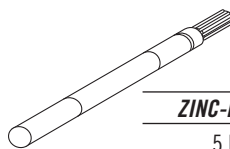
⊗ = COLOR OPTIONS AVAILABLE | **B** = Black **N** = Bronze **W** = White **S** = Sand

* Not for use with Invincible style panels

AEGIS II® XTREME | CUSTOM FINISHES

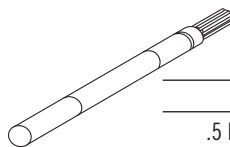
WARRANTY ON CUT COMPONENTS VOID WITHOUT PROPER TOUCH-UP APPLICATION*

*For details & the guidelines for the proper 3-step process, see Ameristar's Sales Policy in the catalog guide



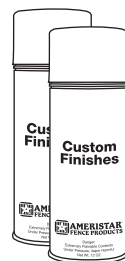
ZINC-RICH PAINT PEN

.5 lbs / PZ100



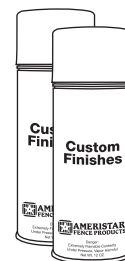
PAINT PEN

.5 lbs / P⊗100



SPRAY PAINT

1.1 lbs / F⊗100



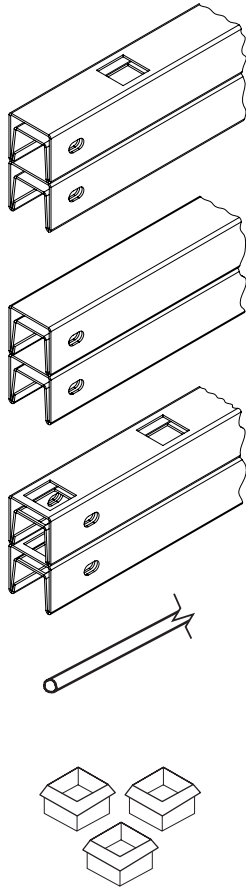
ZINC-RICH PRIMER

1.1 lbs / FZ100

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AEGIS II® XTREME | COMPONENTS



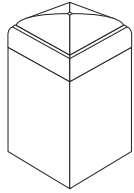
DESCRIPTION	PANEL HEIGHT	LENGTH	ITEM NUMBER	BOX QTY	WEIGHT
ForeRunner Rail / Through Punched <i>Used for Classic, Genesis & Majestic (not Majestic top rail) styles. Includes grommets & retaining rods.</i>	8'	92.625"	CXⓧD8N	2	65.13 lbs
ForeRunner Rail / Bottom Punched <i>Used for Majestic top rail. Includes retaining rods.</i>	8'	92.625"	MXⓧD8N	2	65.87 lbs
ForeRunner Rail / Through Punched FOR INVINCIBLE ONLY <i>Used for Invincible style. Includes grommets & retaining rods.</i>	8'	91.25"	IXⓧD8N	2	63.54 lbs
Retaining Rods <i>Galvanized over .125" diameter steel.</i>		92.625"	H530P	1	.32 lbs
Grommet Sets <i>Available in bag quantities only.</i>	.75" sq.		Xⓧ190P-20	19	4 oz.

ⓧ = COLOR OPTIONS AVAILABLE | **B** = Black | **N** = Bronze | **W** = White | **S** = Sand

Effective: 08/01/18

AEGIS II® XTREME | STEEL SQUARE POSTS

NOTE: 4" x 11ga steel posts are required for Aegis II Xtreme system. Post mounting option shall be determined by project specific engineering & installation requirements. Engineering calculations provided by others.



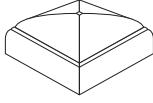
STEEL POSTS

4"sq. x 11ga.

POST LENGTH	PLATE SIZE	ITEM NUMBER	WEIGHT
4'	8" sq. x .375" / .5625" holes (8876G)	P⊗40048P	33 lbs
5'	8" sq. x .375" / .5625" holes (8876G)	P⊗40060P	39 lbs
6'	8" sq. x .375" / .5625" holes (8876G)	P⊗40072P	47 lbs
7'	8" sq. x .375" / .5625" holes (8876G)	P⊗40084P	54 lbs
8'	8" sq. x .375" / .5625" holes (8876G)	P⊗40096P	61 lbs
9'	8" sq. x .375" / .5625" holes (8876G)	P⊗40108P	67 lbs
10'	8" sq. x .375" / .5625" holes (8876G)	P⊗40120P	74 lbs

Effective: 08/01/18

AEGIS II® XTREME | POST CAPS



STANDARD FLAT CAP
Steel



BALL CAP
Aluminum

CAP SIZE	CAP TYPE	ITEM NUMBER	WEIGHT
4"sq.	Flat Cap	A⊗509	0.4 lbs
4"sq.	Ball Cap	A⊗517	2.0 lbs

⊗ = COLOR OPTIONS AVAILABLE | B = Black N = Bronze W = White
S = Sand

Effective: 08/01/18

AEGIS II® XTREME | CONSTRUCTION SPECIFICATION 32 31 19

HEAVY INDUSTRIAL STEEL ORNAMENTAL FENCE SYSTEM – INTERNALLY SECURED

PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and appurtenances necessary for installation of the industrial ornamental steel fence system defined herein at (specify project site).

1.02 RELATED WORK

Section ____ - Earthwork

Section ____ - Concrete

1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a total industrial ornamental steel fence system of the Ameristar® Aegis II® Xtreme (specify Classic™, Majestic™, Genesis™ or Invincible™) design. They system shall include all components (i.e., pickets, rails, posts, and hardware) required.

1.04 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.05 REFERENCES

- **ASTM A653/A653M** – Standard Specification for Steel Sheet, Zinc-Coated (*Galvanized*) or Zinc-Iron Alloy Coated (*Galvannealed*) by the Hot-Dip Process
- **ASTM B117** – Practice for Operating Salt-Spray (*Fog*) Apparatus
- **ASTM D523** – Test Method for Specular Gloss
- **ASTM D714** – Test Method for Evaluating Degree of Blistering in Paint
- **ASTM D1654** – Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- **ASTM D2244** – Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates
- **ASTM D2794** – Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- **ASTM D3359** – Test Method for Measuring Adhesion by Tape Test
- **ASTM F2408** – Ornamental Fences Employing Galvanized Steel Tubular Pickets
- **AASHTO LRFD Bridge Design Specifications, 6th Edition**

1.06 SUBMITTAL

The manufacturer's submittal package shall be provided prior to installation.

1.07 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damages occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

1.08 PRODUCT WARRANTY

A. All structural fence components (*i.e. rails, pickets, and posts*) shall be warranted within specified limitations, by the manufacturer for a period of 10 years from date of original purchase. Warranty shall cover any defects in material finish, including cracking, peeling, chipping, blistering or corroding.

PART 2 - MATERIALS

2.01 MANUFACTURER

The fence system shall conform to Ameristar Aegis II Xtreme, (specify Classic, Majestic, Genesis, or Invincible) design, (specify 2-Rail or 3-Rail) style manufactured by Ameristar Perimeter Security USA Inc. in Tulsa, Oklahoma.

2.02 MATERIAL

- A. Steel material for fence framework (i.e. tubular pickets, rails and posts), shall be galvanized prior to forming in accordance with the requirements of ASTM A653/A653M, with minimum yield strength of 50,000 psi. The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft² (276 g/m²), Coating Designation G-90.
- B. Material for pickets shall be 1" square x 14 Ga. tubing. The cross-sectional shape of the rails shall conform to the manufacturer's ForeRunner Xtreme™ dual rail design with outside cross-section dimensions of 1.75" x 3.5" and a minimum material thickness of 14 Ga. Picket holes in the ForeRunner Xtreme rail shall be spaced 4.715" o.c., except for Invincible style, which shall be, spaced 4.98" o.c. Picket retaining rods shall be 0.125" diameter galvanized steel. High quality PVC grommets shall be supplied to seal all picket-to-rail intersections. Fence posts shall meet the minimum size of 4" x 11ga. with 5/8" thick minimum post plates.
- C. Material for posts shall be 4" square x 11 Ga. Mounting plate options shall be engineered as required to meet herein described panel loading requirements.

Effective: 08/01/18

AEGIS II® XTREME | CONSTRUCTION SPECIFICATION 32 31 19

HEAVY INDUSTRIAL STEEL ORNAMENTAL FENCE SYSTEM – INTERNALLY SECURED

2.03 FABRICATION

- A. Pickets, rails and posts shall be precut to specified lengths. ForeRunner Xtreme rails shall be prepunched to accept pickets. Pickets shall be predrilled to accept retaining rods.
- B. Grommets shall be inserted into the prepunched holes in the rails and pickets shall be inserted through the grommets so that predrilled picket holes align with the internal upper raceway of the ForeRunner Xtreme rails (Note: This can best be accomplished by making an alignment jig). Retaining rods shall be inserted into each ForeRunner Xtreme rail so that they pass through the predrilled holes in each picket. Panels shall be biasable, capable of 5 inches over eight foot span.
- C. The manufactured galvanized rails shall be subjected to a multi-stage pretreatment/wash, followed by a dual stage coating process consisting of a cathodic electro-coat epoxy primer base coat and an electrostatic spray topcoat application, a PermaCoat® powder coat system. The manufactured galvanized pickets and posts be subjected to the PermaCoat thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including, as a minimum, a six-stage pretreatment/wash, an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils (0.0508mm). The topcoat shall be a “no-mar” TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color shall be (specify Black, Bronze, White, or Desert Sand). The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic shown in Table 1.
- D. AASHTO Compliant Loading - 2 rail systems (i.e., panels) shall be capable of supporting 450 lbs. vertical point load applied at any point along the span, 50 lbs. per linear foot vertical load and 50 lbs. per linear foot horizontal loading without permanent deformation per rail. Vertical and horizontal loading values shall be simultaneously applied. Completed section shall be capable of supporting a total vertical load of 1700 lbs. per section.

- E. AASHTO Compliant Loading -3 rail systems (i.e., panels) shall be capable of supporting 480 lbs. vertical point load applied at any point along the span, 50 lbs. per linear foot vertical load, 50 lbs. per linear foot horizontal loading without permanent deformation per rail. Vertical and horizontal loading values shall be simultaneously applied. Completed section shall be capable of supporting a total vertical load of 2640 lbs. per section.
- F. Completed Sections shall comply with AASHTO 13.8.2, Load Combination Limit State: Strength 1, 1.00 design live load, 1.25 dead load.

PART 3 - EXECUTION

3.01 PREPARATION

All new installation shall be laid out by the contractor in accordance with the construction plans.

3.02 FENCE INSTALLATION

Fence post shall be spaced according to product drawings. For installations that must be raked to follow sloping grades, the post spacing dimension must be measured along the grade. Fence panels shall be attached to posts with brackets supplied by the manufacturer. Posts setting by methods such as plated posts or grouted core-drilled footers are permissible only if shown by engineering analysis to be sufficient in strength for the intended application.

3.03 FENCE INSTALLATION MAINTENANCE

When cutting/drilling rails or posts adhere to the following steps to seal the exposed steel surfaces; 1) Remove all metal shavings from cut area. 2) Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry. 3) Apply 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. Ameristar spray cans or paint pens shall be used to prime and finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-Ameristar parts or components will negate the manufactures' warranty.

3.04 CLEANING

The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.

SEE REFERENCED TABLES ON THE FOLLOWING PAGE

Effective: 08/01/18

AEGIS II® XTREME | CONSTRUCTION SPECIFICATION 32 31 19

HEAVY INDUSTRIAL STEEL ORNAMENTAL FENCE SYSTEM – INTERNALLY SECURED

TABLE 1

COATING PERFORMANCE REQUIREMENTS		
QUALITY CHARACTERISTICS	ASTM TEST METHOD	PERFORMANCE REQUIREMENTS
ADHESION	D3359 – METHOD B	Adhesion (retention of coating) over 90% of test area (tape and knife kit test).
CORROSION RESISTANCE	B117, D714, D1654	Corrosion resistance over 3,500 hours (scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters)
IMPACT RESISTANCE	D2794	Impact resistance over 60" lb. (forward impact using 0.625" ball).
WEATHERING RESISTANCE	D822 D2244, D523 (60° method)	Weathering resistance over 1,000 hours (failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).

TABLE 2

AEGIS II XTREME POST SPACING BY BRACKET TYPE						
SPAN	Invincible 8' nominal (91¼")			Classic, Genesis & Majestic 8' nominal (92½" rails)		
	4"			4"		
POST SIZE	4"			4"		
BRACKET TYPE	LINE/END TO LINE/END	LINE/END TO SWIVEL	SWIVEL TO SWIVEL	LINE/END TO LINE/END	LINE/END TO SWIVEL	SWIVEL TO SWIVEL
POST SETTINGS ± .25" O.C.	96.75"	97.75"	98.75"	98.375"	99.875"	101.25"

*When using swivel brackets on either or both ends of a panel installation, care must be taken to ensure the spacing between post and adjoining pickets meets applicable codes. This may require trimming one or both ends of panel.

Effective: 08/01/18

AEGIS II® XTREME | LIMITED WARRANTY

INTERNALLY SECURED STEEL ORNAMENTAL FENCE PRODUCTS

Aegis II® Xtreme Ornamental Pedestrian Railing System by Ameristar® is manufactured from the highest quality materials by skilled craftsmen to meet the highest standards of workmanship in the industry. Galvanized steel framework shall be subject to a six stage pretreatment/wash followed by an electrostatic spray application of PermaCoat® Color System, a two coat powder system. The base coat is a thermosetting epoxy powder coating (*gray in color*). The top coat is a “no-mar” TGIC polyester powder coat finish, which provides the protection necessary to withstand adverse environmental conditions.

The powder coated surface on all framework (*i.e., pickets, rails and posts*) by Ameristar is guaranteed under normal and proper usage, against cracking, peeling, chipping, blistering or corroding for a period of ten (10) years from the original purchase date. Normal and proper usage does not include physical damage, abrasion or exposure to salty environments to the protective coating.

Aegis II Xtreme Ornamental Pedestrian Railing System framework is also guaranteed for the same period of time against defects in workmanship or materials.

Should any ornamental fence framework manufactured by Ameristar Perimeter Security fail in accordance with any of the above conditions, Ameristar warrants to the original purchaser their redemption through replacement, renewal or issuance of a pro-rated credit. The decision as to which method of redemption is allowed is solely at the discretion of Ameristar.

If pro-rated allowance is the chosen alternative, the amount will be based on the total number of years under warranty from date of purchase to date of claim, based on the original cost of framing materials found to be defective. Notice of failure under the conditions of this warranty shall be sent to Ameristar or its authorized representative, in writing, together with proof of purchase and shall specify the nature of the defect and when it was first observed. When cutting Aegis II Xtreme components immediately seal the exposed surfaces by 1) Removing all metal shavings from cut area, 2) Apply zinc-rich primer to thoroughly cover cut edge and drilled hole; let dry, 3) Apply two (2) coats of custom finish paint matching fence color

Failure to seal exposed surfaces per steps 1-3 will negate warranty. If the contractor uses non Ameristar parts/components this will negate the warranty. Should the fence be improperly installed, Ameristar shall not be responsible for guaranteed performance or appearance of the material. Neither does this guarantee apply when failure or damage is due to improper use or application, abuse or misuse, salty environments, vandalism or acts of God. Ameristar reserves the right to inspect the material to determine validity of the claim.

Upon validation of the claim by Ameristar or its authorized representative, redemption by replacement, renewal or issuance of a pro-rated credit shall be made by Ameristar. Reimbursement for the costs of removal and installation of materials are not included in the guarantee, nor will Ameristar provide those services.

The above constitutes the complete warranty by the manufacturer. No other agreement, written or implied, is valid. Ameristar does not authorize any other person or agent to make any other express warranties. Ameristar neither assumes nor authorizes any other person or agent to assume any other liability in connection with Aegis Xtreme II Ornamental Pedestrian Railing System. Some jurisdictions do not allow limitations on how long an implied warranty lasts, nor do they allow an exclusion or limitation of incidental or consequential damages; therefore, the limitations and exclusions noted herein may not apply.

Effective: 08/01/18