

IMPASSE II®



HIGH SECURITY STEEL PALISADE FENCING

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. Impasse II is the *best choice for securing at risk facilities or protecting specific assets within a property.*

DESIGN INTEGRATION

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**
- ▶ **Intrusion Detection / Fiber Optic Cables**
- ▶ **Access Control Wiring**
- ▶ **Conduits**
- ▶ **Anti-Ram Cabling (Stalwart)**

GROUNDING DESIGN

Impasse II is the first coated fence system that has been successfully tested to IEEE grounding standards.

PRIMARY APPLICATIONS

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



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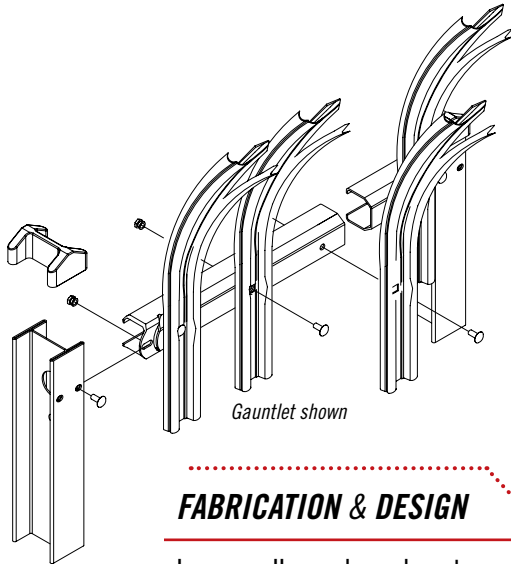
ASSA ABLOY, the global leader in door opening solutions

AMERISTAR®
ASSA ABLOY

IMPASSE II[®]

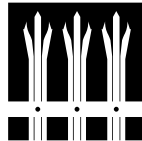
HIGH SECURITY STEEL PALISADE FENCING

2.75"w x 14ga PALES | 2" x 2" x 11ga RAILS | 3" x 2.75" x 12ga & 4" x 2.75" x 11ga I-BEAM POSTS

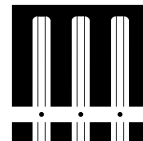


Gauntlet shown

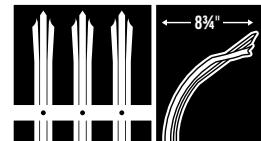
STYLE OPTIONS



TRIDENT™



STRONGHOLD™



GAUNTLET™

Impasse II Anti-Scale option is also available

FABRICATION & DESIGN

Impasse II panels and posts are manufactured using high-tensile pre-galvanized G-90 steel. Each component has been roll-formed into a unique profile that yields significant strength properties. Impasse II's distinct design enables the fence to traverse aggressive changes in grade in order to maintain security along any perimeter. Each connection point of the Impasse II system is secured with tamper-proof fasteners providing the highest level of security and versatility.



PERMACOAT™ PROTECTIVE FINISH

Ameristar's production facilities use a state-of-the-art polyester powder coating system that provides a durable and scratch resistant finish. Impasse II is protected with Ameristar's PermaCoat multi-layer coating process. The combination of these layers delivers a system that increases weathering resistance and product durability. The Ameristar coating system results in finished surfaces with unmatched performance.



15 YEAR LIMITED WARRANTY

Impasse II is coated using Ameristar's PermaCoat process, this dual-coat finish yields the best results for durability and weathering in the fence industry. Ameristar has over 25 years of experience and research in coating fence products allowing Impasse to support a 15 year warranty.



DOMESTIC MANUFACTURING

Ameristar is committed to providing products that are manufactured in the USA. We have made significant investments in technology, process improvement, and employee training in an effort to secure American jobs and combat inferior import products.



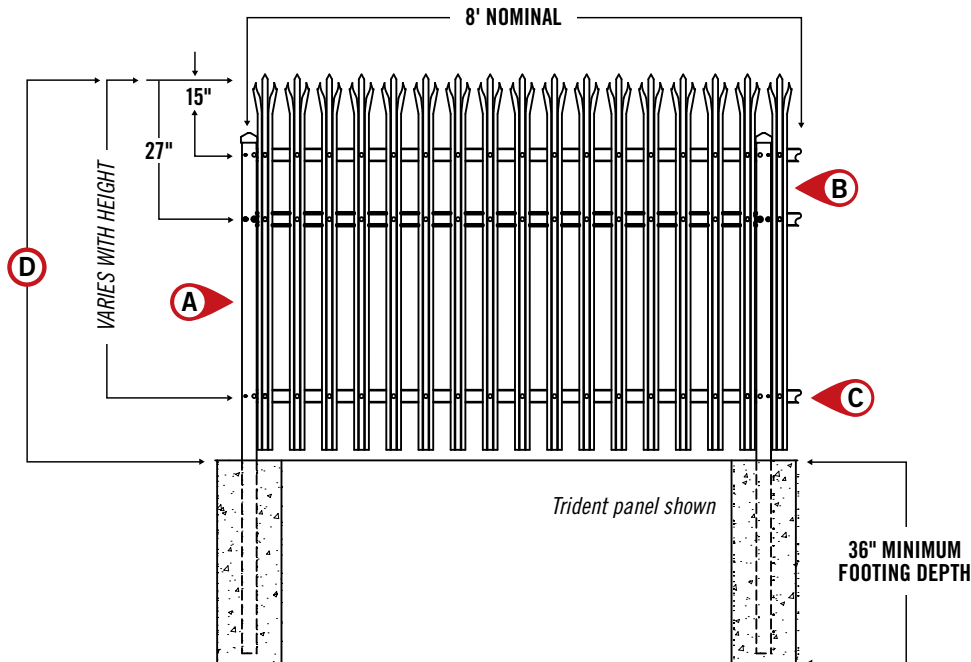
FENCE PRODUCTS

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IMPASSE II® | 2 & 3-RAIL OPTIONS | 3.25" AIR-SPACE

STANDARD BOTTOM AVAILABLE



- (A) 3" x 2.75" x 12ga / 4" x 2.75" x 11ga I-BEAM POSTS**
- (B) 2.75"sq x 14ga PALES**
- (C) 2"sq x 11ga RAILS**
- (D) 6', 7', 8', 9' & 10' PANEL HEIGHTS**




PANELS REQUIRE ASSEMBLY



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

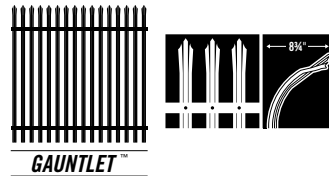
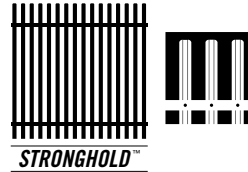
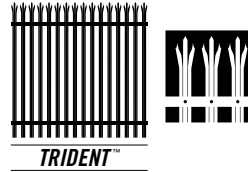
Effective: 01/01/16

IMPASSE II® | 2-RAIL PANELS

STANDARD BOTTOM | 8' PANEL LENGTH (95" actual width) | 16 PALES PER PANEL | ASSEMBLY REQUIRED






PANEL	ITEM NUMBER	WEIGHT	STOCKING
6'	3  20708R	149 lbs	⊙
7'	3  20828R	168 / 187†	⊙
8'	3  20948R	187 / 208†	⊙



-  = FENCE STYLES AVAILABLE | **T** = Trident **S** = Stronghold **G** = Gauntlet†
 -  = 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.

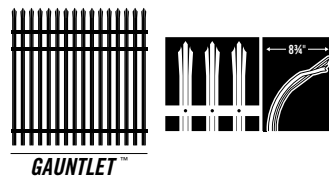
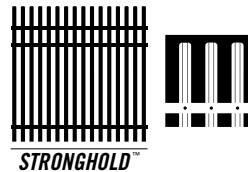
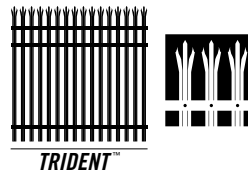


IMPASSE II® | 3-RAIL PANELS

STANDARD BOTTOM | 8' PANEL LENGTH (95" actual width) | 16 PALES PER PANEL | ASSEMBLY REQUIRED

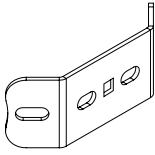
PANEL	ITEM NUMBER	WEIGHT	STOCKING
6'	3  30708R	166 lbs	⊙
7'	3  30828R	186 / 205†	⊙
8'	3  30948R	205 / 225†	⊙
9'	3  31068R	224 / 246†	⊙
10'	3  31188R	243 / 267†	⊙

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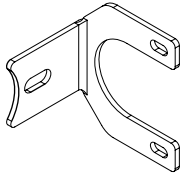


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IMPASSE II® | BRACKETS



DESCRIPTION	ITEM NUMBER	BAG QTY	BOX QTY	WEIGHT
Corner Bracket Kit	MP⊗610	2	50	1.0 lbs
<i>MPB610 Kit Contains: (1) Impasse II Corner Bracket (4) .3125" x .75" Carriage Bolts (5) .3125" Security Nuts (1) .3125" Washer (1) .3125" x .75" Elevator Bolt (2) (.3125" x 1.125" Carriage Bolts (2) .375" x .825" Screws (2) .3125" Flange Nuts (2) .375" Nuts (1) Instruction Flyer</i>				

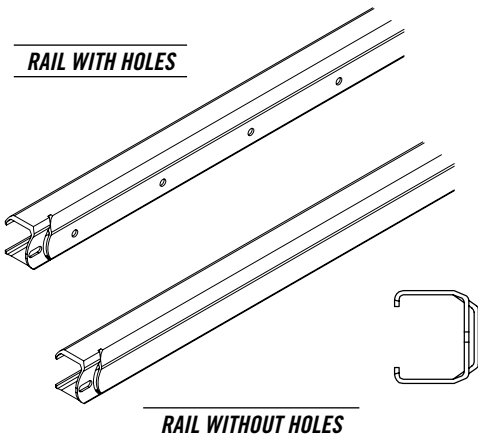


Flat Strap Bracket Kit	B⊗Q22R	2	80	.5 lbs
<i>BB022 Kit Contains: (1) Impasse II Flat Strap Bracket (2) .3125" x .75" Carriage Bolts (2) .3125" Security Nuts</i>				

Gate Post Bracket Kit	MP⊗607	2	80	.50 lbs
<i>MPB607 Kit Contains: (1) Impasse II Flat Mount Bracket (2) .375" x 1.375" Screws (1) .3125" x .875" Carriage Bolt (1) .3125" Flange Nut (1) .3125" x .75" Carriage Bolt (1) .3125" Security Nut (1) Instruction Flyer</i>				

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

IMPASSE II® | RAILS



RAIL LENGTH	ITEM NUMBER	WEIGHT
95'	RIM⊗-8*	16.6 lbs
95"	S⊗R95N**	16.6 lbs
95'	RIM⊗-8-AC*◇	16.6 lbs

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

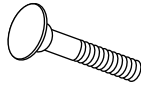
* For 8' Trident, Stronghold & Gauntlet WITH HOLES. Rails do not include fasteners, see following page for Fastener Kit (IRBFAS).

** For 8' Trident, Stronghold & Gauntlet WITHOUT DRILL HOLES.

◇ For ANTI-SCALE SPACING

Effective: 01/01/16

IMPASSE II® | FASTENERS



DESCRIPTION	SIZE	ITEM NUMBER	BAG QTY	ITEM WEIGHT
Carriage Bolts	.3125" x .625"	2-0002- <u>⊗</u> P-20	20	.4 lbs



Security Nuts	.3125"	⊗77484RP-20	20	.4 lbs
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C-Rail Fastener Kit	n/a	IR <u>⊗</u> FAS	1	.108 lbs
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IRBFAS Kit Contains: (2) .3125" x 75" Carriage Bolt | (2) .3125" Security Nut

Groundable Fastener Kit	n/a	IG <u>⊗</u> FAS*	1	1.0 lbs
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IGBFAS Kit Contains: (1) .5" x 1.5" Screw | (2) .3125" x 1.125" Carriage Bolts | (18) .3125" Flange Nuts | (1) .5" Washer | (16) .3125" x .825" Carriage Bolts | (1) Instruction Flyer

Groundable Fastener Kit Anti-Scale	n/a	IG <u>⊗</u> FAS-AC*	1	1.25 lbs
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IGBFAS-AC Kit Contains: (1) .5" x 1.5" Screw | (2) .3125" x 1.125" Carriage Bolts | (23) .3125" x .875" Carriage Bolts | (25) .3125" Flange Nuts | (1) .5" Washer | (1) Instruction Flyer



Fastener Socket	n/a	8865PFG	1	.06 lbs
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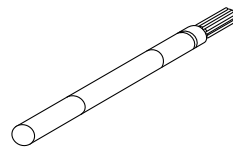
⊗ = COLOR OPTIONS AVAILABLE | B = Black N = Bronze W = White S = Sand

⊠ = COLOR OPTIONS AVAILABLE | 1 = Black 2 = Bronze 3 = Sand 4 = White

* = 1 KIT PER RAIL

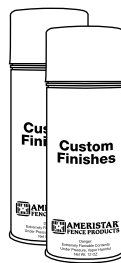
IMPASSE II® | CUSTOM FINISHES

WARRANTY ON RAILS CUT VOID WITHOUT PROPER APPLICATION OF ZINC RICH PRIMER & TOUCH-UP PAINT PENS



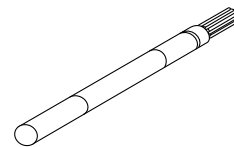
PAINT PEN

.5 lbs / P⊗100



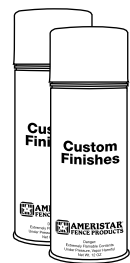
SPRAY PAINT

1.1 lbs / F⊗100



ZINC-RICH PAINT PEN

.5 lbs / PZ100



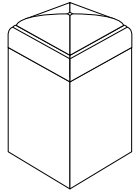
ZINC-RICH PRIMER

1.1 lbs / FZ100

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IMPASSE II® | ORNAMENTAL STEEL SQUARE POSTS



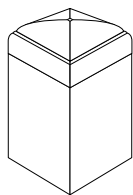
STEEL POSTS

	POST LENGTH	ITEM NUMBER	WEIGHT
3"sq. x 12 ga.	9'	P@30108	39 lbs
	10'	P@30120	43 lbs
	11'	P@30132	47 lbs
	12'	P@30144	51 lbs
	13'	P@30156	56 lbs
	14'	P@30168	60 lbs
	15'	P@30180	64 lbs
	16'	P@30192	69 lbs
4"sq. x 11 ga.	9'	P@40108	61 lbs
	10'	P@40120	67 lbs
	11'	P@40132	74 lbs
	12'	P@40144	81 lbs
	13'	P@40156	87 lbs
	14'	P@40168	94 lbs
	15'	P@40180	101 lbs
	16'	P@40192	108 lbs
6"sq. x .1875 wall	9'	P@60108	131 lbs
	10'	P@60120	145 lbs
	11'	P@60132	160 lbs
	12'	P@60144	174 lbs
	13'	P@60156	189 lbs
	14'	P@60168	203 lbs
	15'	P@60180	218 lbs
	16'	P@60192	232 lbs
8"sq. x .25 wall	9'	P@80108	233 lbs
	10'	P@80120	259 lbs
	11'	P@80132	285 lbs
	12'	P@80144	311 lbs
	13'	P@80156	336 lbs
	14'	P@80168	370 lbs
	15'	P@80180	390 lbs
	16'	P@80192	415 lbs

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

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IMPASSE II® | STEEL PLATED SQUARE POSTS



STEEL POSTS

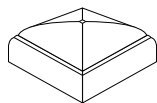
3"sq. x 12ga.

4"sq. x 11ga.

POST LENGTH	PLATE SIZE	ITEM NUMBER	WEIGHT
6'	6" sq. x .25" / .5625" holes (5003G)	Pⓧ30072P	30 lbs
7'	6" sq. x .25" / .5625" holes (5003G)	Pⓧ30084P	34 lbs
8'	6" sq. x .25" / .5625" holes (5003G)	Pⓧ30096P	39 lbs
9'	6" sq. x .25" / .5625" holes (5003G)	Pⓧ30108P	43 lbs
10'	6" sq. x .25" / .5625" holes (5003G)	Pⓧ30120P	47 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

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

IMPASSE II® | STEEL POST CAPS



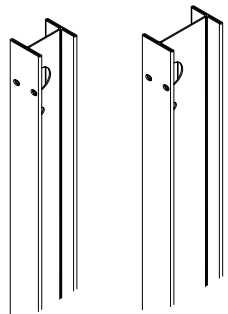
STANDARD FLAT CAP

CAP SIZE	ITEM NUMBER	WEIGHT
3"sq.	Aⓧ 508	0.3 lbs
4"sq.	Aⓧ 509	0.4 lbs
6"sq.	Aⓧ 515	0.8 lbs
8"sq.	Aⓧ 801	2 lbs

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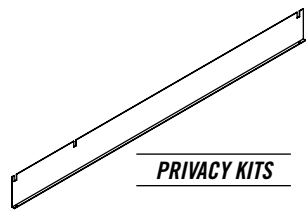
Effective: 01/01/16

IMPASSE II® | I-BEAM POSTS, POST CAPS & ACCESSORIES



3" & 4" I-BEAM POSTS

LENGTH	ITEM NUMBER	HOLE QTY	WEIGHT	STOCKING
8'	3Pⓧ2096-32	2	36 lbs	⊗
8'	3Pⓧ3096-32	3	36 lbs	⊗
9'	3Pⓧ2108-32	2	40 lbs	⊗
9'	3Pⓧ3108-32	3	40 lbs	⊗
10'	3Pⓧ2120-32	2	45 lbs	⊗
10'	3Pⓧ3120-32	3	45 lbs	⊗
10'	3Pⓧ3120-41	3	45 lbs	⊗
11'	3Pⓧ3132-41	3	49 lbs	⊗
12'	3Pⓧ3144-41	3	54 lbs	⊗



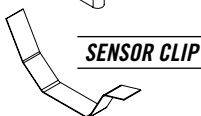
PRIVACY KITS

HEIGHT	ITEM NUMBER	LENGTH	WEIGHT	STOCKING
6'	IPKⓧ708	46.625"	38 lbs	⊗
7'	IPKⓧ828	58.625"	45 lbs	⊗
8'	IPKⓧ948	70.625"	55 lbs	⊗
9'	IPKⓧ1068	82.625"	67 lbs	⊗
10'	IPKⓧ1188	94.625"	77 lbs	⊗



I-BEAM POST CAPS

DESCRIPTION	ITEM NUMBER	SIZE	BOX QTY	WEIGHT	STOCKING
3" I-Beam Post Caps	IⓧC3	3.375"	30	.5 lbs	⊗
4" I Beam Post Caps	IⓧC4	4.4375"	30	.5 lbs	⊗
Rail Cover	IRC81	94"	n/a	1 lbs	⊗
Sensor Wire Clip	SWC100	n/a	100	2 lbs	⊗



SENSOR CLIP

ⓧ = 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: 01/01/16

IMPASSE II® | CONSTRUCTION SPECIFICATION 32 31 19

HIGH SECURITY STEEL FENCE SYSTEM | ORNAMENTAL PALE

PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and appurtenances necessary for installation of the steel corrugated pale security 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 steel ornamental pale high security fence system of the Ameristar® Impasse II® (*specify Trident™, Stronghold™ or Gauntlet™*) design. The system shall include all components (*i.e., pales, rails, posts, gates 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 D822** – Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus
- **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

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 damage 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 15 years from date of original purchase. Warranty shall cover any defects in material finish, including cracking, peeling, chipping, blistering or corroding.
- B. Reimbursement for labor necessary to restore or replace components that have been found to be defective under the terms of manufacturer's warranty shall be guaranteed for five (5) years from date of original purchase.

PART 2 - MATERIALS

2.01 MANUFACTURER

The steel ornamental pale high security fence system shall conform to Ameristar Impasse II (*specify Trident, Stronghold or Gauntlet*) (*specify 2-Rail or 3-Rail*) style manufactured by Ameristar Fence Products, Inc., in Tulsa, Oklahoma.

2.02 MATERIAL

- A. Steel material for fence framework (*i.e., corrugated pales, rails and posts*), when galvanized prior to forming, shall conform to the requirements of **ASTM A924/A924M**, with a minimum yield strength of 45,000 psi (310 MPa). 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 corrugated pales shall be a nominal 2.75" x .75" x 14 Ga. The cross-sectional shape of the rails shall conform to the manufacturer's Impasse II rail design a nominal 2" x 2" x 11 Ga. Pre-drilled holes in the Impasse II rail shall be spaced 6" on center, providing a pale airspace of no greater than 3.25". Tamperproof fasteners shall be used to fasten each pale to rail at every intersection. Posts shall conform to the manufacturer's Impasse II I-Beam design with a nominal 3" x 2.75" x 12 Ga. for fence panel heights up to & including 8' height and/or Impasse II I-Beam design with a nominal 4" x 2.75" x 11 Ga. for fence heights greater than 8' up to 10' panel height. Fence posts and gate posts shall meet the minimum size requirements of **Table 1**.
- C. If applicable - Material for steel Impasse II privacy screening

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HIGH SECURITY STEEL FENCE SYSTEM | ORNAMENTAL PALE

shall be 18ga. preformed slats, providing complete screening coverage between pales and at pale to post connections. Impasse II privacy screening shall provide screening from top rail to bottom rail, and be capable of traversing terrain without impeding the raking capabilities of the fencing panel.

2.03 FABRICATION

- A.** Pales, rails and posts shall be pre-cut to specified lengths. Impasse II rails shall be pre-punched to accept tamperproof security fasteners. Post flange shall be pre-punched to accept rail to post attachment. Post web shall be punched providing a clear opening for interior of rails to align throughout the entire system for affixing conduit, video cabling, IDS wiring, and other components for a complete systems integration. Impasse II rails shall be attached to post flange providing a bracket-less design at each intermediate post.
- B.** The manufactured galvanized framework shall 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 (*with zinc phosphate*), 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 2**.
- C.** Completed panels shall be capable of supporting a 400 lb. load (*applied at midspan*) without permanent deformation. Panels shall be biasable to a 30° change in grade.
- D.** Swing gates shall be fabricated using 2" sq. x 11ga rail, 2" sq. x 11ga. gate ends, and 2.75" x .75" x 0.075 pales. Gates that exceed 6' in width will have a 2" sq. x 11ga. intermediate upright. All rail and upright intersections shall be joined by welding. All pale and rail intersections shall also be joined by welding.
- E.** Sliding cantilever gates shall be TransPort IS design matching style, height, and color of fence system. The dual enclosed track slide gate shall be an aluminum component design using tracks, uprights, pales, hardware, fittings, and fasteners. Gate installation shall comply with latest **ASTM F2200** standards for automated gates, regardless if the gate is of manual operation.

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 **Table 3**, plus or minus ¼". 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 the line and end posts with fasteners supplied by the manufacturer. Attachment to corner post shall be made using brackets and fasteners supplied by the manufacturer (*See Figure 1*). Posts shall be set in concrete footers having a minimum depth of 36" (*Note: In some cases, local restrictions of freezing weather conditions may require a greater depth*). The “Earthwork” and “Concrete” sections of this specification shall govern material requirements for the concrete footer. Posts setting by other 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 GATE INSTALLATION

Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles. The manufacturers' gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendations.

3.05 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

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IMPASSE II® | CONSTRUCTION SPECIFICATION 32 31 19

HIGH SECURITY STEEL FENCE SYSTEM | ORNAMENTAL PALE

TABLE 1

MINIMUM SIZES FOR IMPASSE II POSTS				
FENCE POSTS		PANEL HEIGHTS		
3" x 2.75" x 12ga. I-beam		up to and including 8' height		
4" x 2.75" x 11 ga. I-beam		over 8' & including 10' height		

GATE LEAF	GATE HEIGHT			
	up to & including 6'	Over 6' to 8'	Over 8' to 10'	Over 12'
up to 4'	3" x 12 gauge	3" x 12 gauge	4" x 11 gauge	4" x 11 gauge
4'1" to 6'	3" x 12 gauge	3" x 12 gauge	4" x 11 gauge	4" x 11 gauge
6'1" to 8'	4" x 11 gauge	6" x 3/16"	6" x 3/16"	6" x 3/16"
8'1" to 10'	4" x 11 gauge	6" x 3/16"	6" x 3/16"	6" x 3/16"
10'1" to 12'	6" x 3/16"	6" x 3/16"	6" x 3/16"	8" x 1/4"
12'1" to 16'	6" x 3/16"	6" x 3/16"	8" x 1/4"	8" x 1/4"

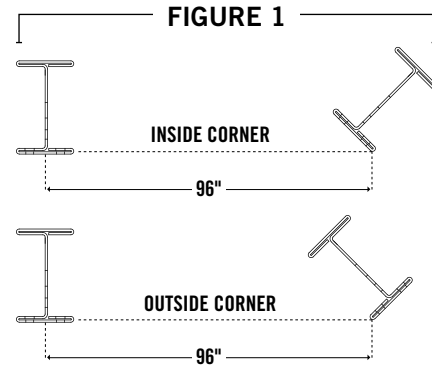


TABLE 2

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 3

IMPASSE II POST SPACING BY BRACKET TYPE		
SPAN	8' Nominal (95" rail)	
POST SIZE	3" x 2 3/4" x 12ga. I-beam	3" x 2 3/4" x 12ga. I-beam
	Line & End Posts	
POST SETTINGS ± 1/4" O.C.	96"	96"

TABLE 4

IMPASSE II WIND LOADING					
FENCE HEIGHT	RAIL LENGTH	RAIL QUANTITY	I-POST SIZE	WIND LOAD CAPACITY FACTOR (PSF)	TYPICAL WIND LOAD CAPACITY (MPH)
6'	8'	2	3" x 2 3/4" x 12 ga.	45.7 (PSF)	148.5 (MPH)
			4" x 2 3/4" x 11 ga.	74.2 (PSF)	189.2 (MPH)
		3	3" x 2 3/4" x 12 ga.	45.7 (PSF)	148.5 (MPH)
			4" x 2 3/4" x 11 ga.	74.2 (PSF)	189.2 (MPH)
7'	8'	2	3" x 2 3/4" x 12 ga.	32.2 (PSF)	126.5 (MPH)
			4" x 2 3/4" x 11 ga.	51.8 (PSF)	158.1 (MPH)
		3	3" x 2 3/4" x 12 ga.	33.6 (PSF)	127.3 (MPH)
			4" x 2 3/4" x 11 ga.	54.4 (PSF)	162.0 (MPH)
8'	8'	2	3" x 2 3/4" x 12 ga.	23.1 (PSF)	105.5 (MPH)
			4" x 2 3/4" x 11 ga.	35.5 (PSF)	130.8 (MPH)
		3	3" x 2 3/4" x 12 ga.	25.7 (PSF)	111.3 (MPH)
			4" x 2 3/4" x 11 ga.	41.7 (PSF)	141.8 (MPH)
9'	8'	3	3" x 2 3/4" x 12 ga.	20.3 (PSF)	89.7 (MPH)
			4" x 2 3/4" x 11 ga.	32.9 (PSF)	126.0 (MPH)
10'	8'	3	3" x 2 3/4" x 12 ga.	16.5 (PSF)	80.9 (MPH)
			4" x 2 3/4" x 11 ga.	26.7 (PSF)	113.5 (MPH)

MPH values shown in Table 4 are provided for information only. They are calculated using ANSI/ASCE 7-05, "American Society of Civil Engineers Minimum Design Loads for Buildings and Other Structures" Exposure Category C (open terrain with scattered obstructions having lengths generally less than 30 feet), based on post setting in 36" deep concrete footer in soil assumed to be of mid-range strength and compaction. Since specified project conditions such as jurisdictional building codes, elevation of installation, post base/footer design, soil strength, etc., may change from project to project, a structural engineering evaluation, unique to applicable requirements and conditions, should be performed. Consult your Ameristar Service Representative for an estimate on Engineering Analysis and P.E. Certification.

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IMPASSE II® | LIMITED WARRANTY

HIGH SECURITY STEEL FENCE SYSTEM | ORNAMENTAL PALE

The Impasse II® Steel Security Fence 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 (*with zinc phosphate*) followed by an electrostatic spray application of the 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., pales, rails and posts*) by Ameristar is guaranteed under normal and proper usage, against cracking, peeling, chipping, blistering or corroding for a period of fifteen (15) 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.

Impasse II Steel Security Fence System framework is also guaranteed for the same period of time against defects in workmanship or materials.

Should any Impasse II fence framework manufactured by Ameristar Fence Products fail in accordance with any of the above conditions, Ameristar Fence Products 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 Fence Products 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 Impasse II 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 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. If contractor uses non Ameristar parts/components this will negate the warranty. Should the fence be improperly installed, Ameristar Fence Products 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 Fence Products reserves the right to inspect the material to determine validity of the claim.

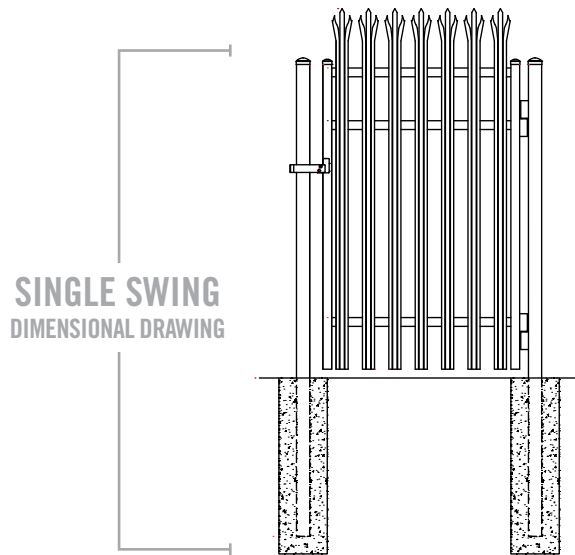
Upon validation of the claim by Ameristar Fence Products or its authorized representative, redemption by replacement, renewal or issuance of a pro-rated credit shall be made by Ameristar Fence Products. Reimbursement for labor necessary to restore and/or replace components that have been found defective under the terms of this warranty is guaranteed to the original purchaser for a period of five (5) years from the original purchase date. Ameristar reserves the right to select the qualified company or individual to perform the labor to repair or replace the components that are deemed to be defective under the terms of this warranty.

The above constitutes the complete warranty by the manufacturer. No other agreement, written or implied, is valid. Ameristar Fence Products does not authorize any other person or agent to make any other express warranties. Ameristar Fence Products neither assumes nor authorizes any other person or agent to assume any other liability in connection with the Impasse II Steel Security Fence 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: 01/01/16

IMPASSE II® | SINGLE SWING GATE SPECIFICATIONS

2"sq x 12ga GATE ENDS | 2"sq x 12ga RAILS | 2.75" x .75" x 14ga PALES | 3.5' - 16' NOMINAL OPENINGS



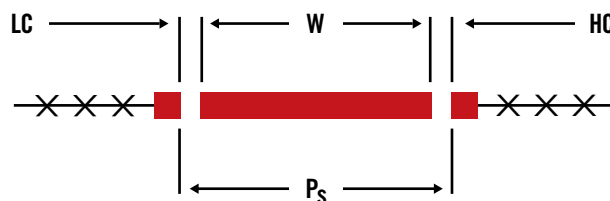
SINGLE SWING DIMENSIONAL DRAWING



SINGLE SWING HARDWARE KITS & POST INTERSPACES

OPENING	LEAF WIDTH*	HC	LC	P _s	HC	LC	P _s	HC	LC	P _s
3.5'	38.75"	2"	2"	42.75"	1.25"	3"	43"	1.25"	3"	43.25"
4'	44.75"	2"	2"	48.75"	1.25"	3"	49"	1.25"	3"	49.25"
5'	56.75"	2"	2"	60.75"	1.25"	3"	61"	1.25"	3"	61.25"
6'	68.75"	2"	2"	72.75"	1.25"	3"	73"	1.25"	3"	73.25"
7'	80.75"	2"	2"	84.75"	1.25"	3"	85"	1.25"	3"	85.25"
8'	92.75"	2"	2"	96.75"	1.25"	3"	97"	1.25"	3"	97.25"
9'	104.75"	2"	2"	108.75"	1.25"	3"	109"	1.25"	3"	109.25"
10'	116.75"	2"	2"	120.75"	1.25"	3"	121"	1.25"	3"	121.25"
11'	128.75"	2"	2"	132.75"	1.25"	3"	133"	1.25"	3"	133.25"
12'	140.75"	2"	2"	144.75"	1.25"	3"	145"	1.25"	3"	145.25"
13'	152.75"	2"	2"	156.75"	1.25"	3"	157"	1.25"	3"	157.25"
14'	164.75"	2"	2"	168.75"	1.25"	3"	169"	1.25"	3"	169.25"
15'	176.75"	2"	2"	180.75"	1.25"	3"	181"	1.25"	3"	181.25"
16'	188.75"	2"	2"	192.75"	1.25"	3"	193"	1.25"	3"	193.25"

W = width* | HC = hinge clearance | LC = latch clearance | P_s = gate post spacing**
 * From outside to outside | ** From inside to inside

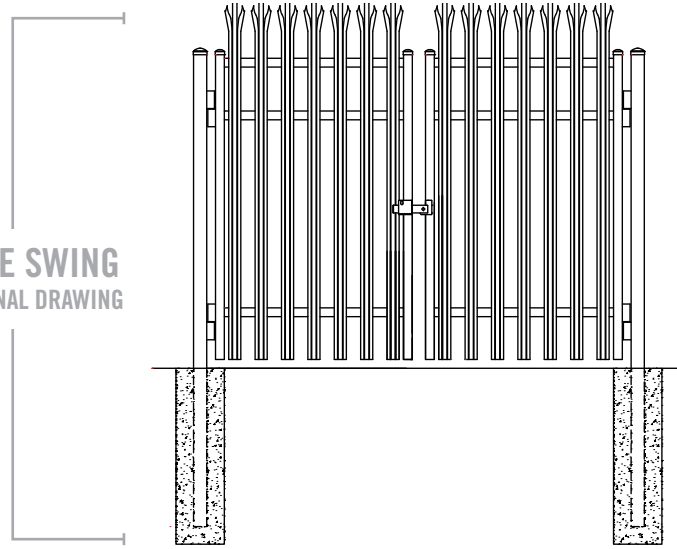


Effective: 01/01/16

IMPASSE II® | DOUBLE SWING GATE SPECIFICATIONS

2"sq x 12ga GATE ENDS | 2"sq x 12ga RAILS | 2.75" x .75" x 14ga PALES | 7' - 32' NOMINAL OPENINGS

DOUBLE SWING
DIMENSIONAL DRAWING



IGBDX FORK LATCH / BOX HINGE KIT | INDUSTRIAL HINGE KIT WITH STRONG ARM

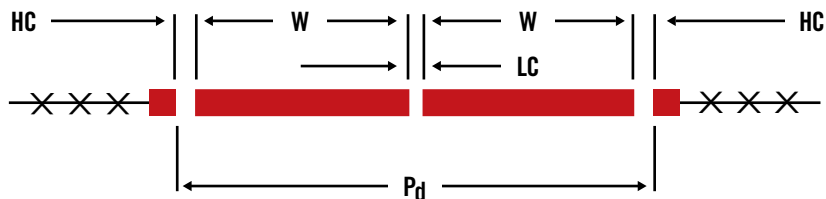
DOUBLE SWING
HARDWARE KITS & POST
INTERSPACES

OPENING	LEAF WIDTH*	HC	LC	P _d	HC	LC	P _d
7'	38.75"	2"	2"	83.5"	1.5"	2"	82.5"
8'	44.75"	2"	2"	95.5"	1.5"	2"	94.5"
10'	56.75"	2"	2"	119.5"	1.5"	2"	118.5"
12'	68.75"	2"	2"	143.5"	1.5"	2"	142.5"
14'	80.75"	2"	2"	167.5"	1.5"	2"	166.5"
16'	92.75"	2"	2"	191.5"	1.5"	2"	190.5"
18'	104.75"	2"	2"	215.5"	1.5"	2"	214.5"
20'	116.75"	2"	2"	239.5"	1.5"	2"	238.5"
22'	128.75"	2"	2"	263.5"	1.5"	2"	262.5"
24'	140.75"	2"	2"	287.5"	1.5"	2"	286"
26'	152.75"	2"	2"	311.5"	1.5"	2"	310.5"
28'	164.75"	2"	2"	335.5"	1.5"	2"	334.5"
30'	175"	2"	2"	359.5"	1.5"	2"	358.5"
32'	188.75"	2"	2"	383.5"	1.5"	2"	382.5"

W = width (x2)* | HC = hinge clearance (x2) | LC = latch clearance

P_d = gate post spacing**

* From outside to outside | ** From inside to inside

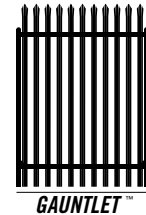
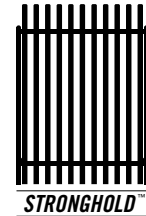
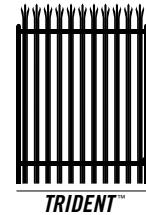


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IMPASSE II® | 2-RAIL SINGLE SWING GATES

4" AIR GAP | STANDARD BOTTOM | GATE HARDWARE SOLD SEPARATELY

	OPENING	LEAF WIDTH	ITEM NUMBER	WEIGHT	STOCKING
6' HEIGHT	3½'	38.75"	3☒⊗2070-42	84 lbs	☉
	4'	44.75"	3☒⊗2070-48	86 lbs	☉
	5'	56.75"	3☒⊗2070-60	90 lbs	☉
	6'	68.75"	3☒⊗2070-72	107 lbs	☉
	7'	80.75"	3☒⊗2070-84	145 lbs	☉
	8'	92.75"	3☒⊗2070-96	162 lbs	☉
	9'	104.75"	3☒⊗2070-108	179 lbs	☉
	10'	116.75"	3☒⊗2070-120	196 lbs	☉
	11'	128.75"	3☒⊗2070-132	213 lbs	☉
	12'	140.75"	3☒⊗2070-144	230 lbs	☉
	13'	152.75"	3☒⊗2070-156	247 lbs	☉
	14'	164.75"	3☒⊗2070-168	277 lbs	☉
7' HEIGHT	15'	176.75"	3☒⊗2070-180	307 lbs	☉
	16'	188.75"	3☒⊗2070-192	337 lbs	☉
	3½'	38.75"	3☒⊗2082-42†	93 lbs	☉
	4'	44.75"	3☒⊗2082-48†	95 lbs	☉
	5'	56.75"	3☒⊗2082-60†	109 lbs	☉
	6'	68.75"	3☒⊗2082-72†	123 lbs	☉
	7'	80.75"	3☒⊗2082-84†	165 lbs	☉
	8'	92.75"	3☒⊗2082-96†	182 lbs	☉
	9'	104.75"	3☒⊗2082-108†	199 lbs	☉
	10'	116.75"	3☒⊗2082-120†	216 lbs	☉
	11'	128.75"	3☒⊗2082-132†	233 lbs	☉
	12'	140.75"	3☒⊗2082-144†	250 lbs	☉
13'	152.75"	3☒⊗2082-156†	267 lbs	☉	
14'	164.75"	3☒⊗2082-168†	297 lbs	☉	
15'	176.75"	3☒⊗2082-180†	327 lbs	☉	
16'	188.75"	3☒⊗2082-192†	357 lbs	☉	



8', 9' & 10' HEIGHTS CONTINUED ON NEXT PAGE

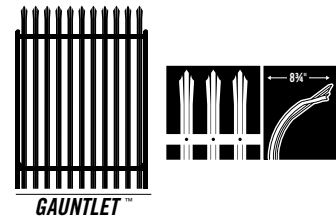
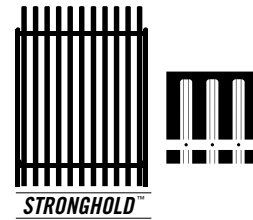
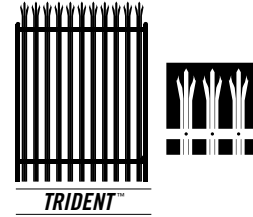
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IMPASSE II® | 2-RAIL SINGLE SWING GATES

4" AIR GAP | STANDARD BOTTOM | GATE HARDWARE SOLD SEPARATELY

	OPENING	LEAF WIDTH	ITEM NUMBER	WEIGHT	STOCKING
8' HEIGHT	3½'	38.75"	3☒⊗2094-42†	104 lbs	⊙
	4'	44.75"	3☒⊗2094-48†	123 lbs	⊙
	5'	56.75"	3☒⊗2094-60†	152 lbs	⊙
	6'	68.75"	3☒⊗2094-72†	177 lbs	⊙
	7'	80.75"	3☒⊗2094-84†	206 lbs	⊙
	8'	92.75"	3☒⊗2094-96†	229 lbs	⊙
	9'	104.75"	3☒⊗2094-108†	252 lbs	⊙
	10'	116.75"	3☒⊗2094-120†	275 lbs	⊙
	11'	128.75"	3☒⊗2094-132†	298 lbs	⊙
	12'	140.75"	3☒⊗2094-144†	321 lbs	⊙
	13'	152.75"	3☒⊗2094-156†	344 lbs	⊙
	14'	164.75"	3☒⊗2094-168†	385 lbs	⊙
	15'	176.75"	3☒⊗2094-180†	406 lbs	⊙
	16'	188.75"	3☒⊗2094-192†	452 lbs	⊙

☒ = FENCE STYLES AVAILABLE | T = Trident S = Stronghold G = Gauntlet†
 ⊗ = 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.

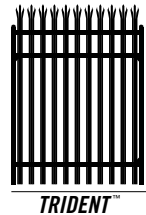


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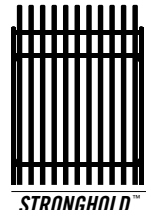
IMPASSE II® | 3-RAIL SINGLE SWING GATES

4" AIR GAP | STANDARD BOTTOM | GATE HARDWARE SOLD SEPARATELY

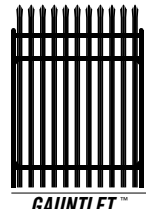
	OPENING	LEAF WIDTH	ITEM NUMBER	WEIGHT	STOCKING
6' HEIGHT	3½'	38.75"	3☒⊗3070-42	91 lbs	☉
	4'	44.75"	3☒⊗3070-48	106 lbs	☉
	5'	56.75"	3☒⊗3070-60	134 lbs	☉
	6'	68.75"	3☒⊗3070-72	162 lbs	☉
	7'	80.75"	3☒⊗3070-84	184 lbs	☉
	8'	92.75"	3☒⊗3070-96	190 lbs	☉
	9'	104.75"	3☒⊗3070-108	197 lbs	☉
	10'	116.75"	3☒⊗3070-120	216 lbs	☉
	11'	128.75"	3☒⊗3070-132	235 lbs	☉
	12'	140.75"	3☒⊗3070-144	254 lbs	☉
	13'	152.75"	3☒⊗3070-156	273 lbs	☉
	14'	164.75"	3☒⊗3070-168	305 lbs	☉
7' HEIGHT	15'	176.75"	3☒⊗3070-180	337 lbs	☉
	16'	188.75"	3☒⊗3070-192	369 lbs	☉
	3½'	38.75"	3☒⊗3082-42†	100 lbs	☉
	4'	44.75"	3☒⊗3082-48†	105 lbs	☉
	5'	56.75"	3☒⊗3082-60†	119 lbs	☉
	6'	68.75"	3☒⊗3082-72†	135 lbs	☉
	7'	80.75"	3☒⊗3082-84†	179 lbs	☉
	8'	92.75"	3☒⊗3082-96†	198 lbs	☉
	9'	104.75"	3☒⊗3082-108†	217 lbs	☉
	10'	116.75"	3☒⊗3082-120†	236 lbs	☉
	11'	128.75"	3☒⊗3082-132†	255 lbs	☉
	12'	140.75"	3☒⊗3082-144†	274 lbs	☉
13'	152.75"	3☒⊗3082-156†	293 lbs	☉	
14'	164.75"	3☒⊗3082-168†	325 lbs	☉	
15'	176.75"	3☒⊗3082-180†	357 lbs	☉	
16'	188.75"	3☒⊗3082-192†	389 lbs	☉	



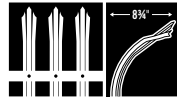
TRIDENT™



STRONGHOLD™



GAUNTLET™



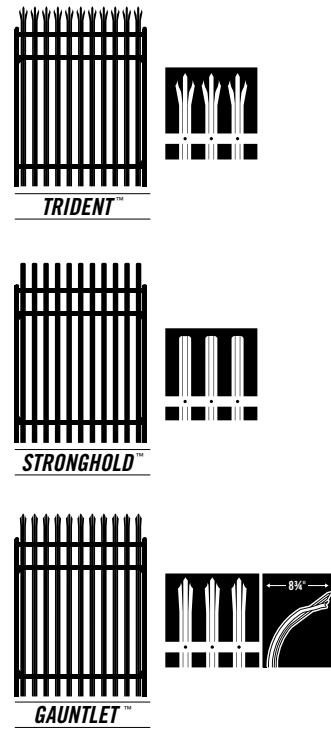
8', 9' & 10' HEIGHTS CONTINUED ON NEXT PAGE

Effective: 01/01/16

IMPASSE II® | 3-RAIL SINGLE SWING GATES

4" AIR GAP | STANDARD BOTTOM | GATE HARDWARE SOLD SEPARATELY

	OPENING	LEAF WIDTH	ITEM NUMBER	WEIGHT	STOCKING
8' HEIGHT	3½'	38.75"	3☒Ⓞ3094-42†	115 lbs	⊙
	4'	44.75"	3☒Ⓞ3094-48†	134 lbs	⊙
	5'	56.75"	3☒Ⓞ3094-60†	163 lbs	⊙
	6'	68.75"	3☒Ⓞ3094-72†	188 lbs	⊙
	7'	80.75"	3☒Ⓞ3094-84†	217 lbs	⊙
	8'	92.75"	3☒Ⓞ3094-96†	240 lbs	⊙
	9'	104.75"	3☒Ⓞ3094-108†	263 lbs	⊙
	10'	116.75"	3☒Ⓞ3094-120†	286 lbs	⊙
	11'	128.75"	3☒Ⓞ3094-132†	309 lbs	⊙
	12'	140.75"	3☒Ⓞ3094-144†	332 lbs	⊙
9' HEIGHT	13'	152.75"	3☒Ⓞ3094-156†	355 lbs	⊙
	14'	164.75"	3☒Ⓞ3094-168†	396 lbs	⊙
	15'	176.75"	3☒Ⓞ3094-180†	417 lbs	⊙
	16'	188.75"	3☒Ⓞ3094-192†	463 lbs	⊙
	3½'	38.75"	3☒Ⓞ3106-42†	122 lbs	⊙
10' HEIGHT	4'	44.75"	3☒Ⓞ3106-48†	145 lbs	⊙
	5'	56.75"	3☒Ⓞ3106-60†	173 lbs	⊙
	6'	68.75"	3☒Ⓞ3106-72†	195 lbs	⊙
	7'	80.75"	3☒Ⓞ3106-84†	219 lbs	⊙
9' HEIGHT	8'	92.75"	3☒Ⓞ3106-96†	238 lbs	⊙
	3-1/2'	38.75"	3☒Ⓞ3118-42†	133 lbs	⊙
	4'	44.75"	3☒Ⓞ3118-48†	151 lbs	⊙
	5'	56.75"	3☒Ⓞ3118-60†	195 lbs	⊙
	6'	68.75"	3☒Ⓞ3118-72†	209 lbs	⊙
10' HEIGHT	7'	80.75"	3☒Ⓞ3118-84†	239 lbs	⊙
	8'	92.75"	3☒Ⓞ3118-96†	258 lbs	⊙



☒ = FENCE STYLES AVAILABLE | T = Trident S = Stronghold G = Gauntlet†
 Ⓞ = 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: 01/01/16