ORNAMENTAL STEEL FENCING

Enhance and protect the beauty and value of your Industrial or Residential property with a longlasting, maintenance-free INTREPID® Ornamental Steel Fence from National Fence Systems, Inc.

Residential

Commercial

Industrial









Featuring Super Durable Polyester Powder Coatings



www.intrepidsteel.com

Residential and Industrial Fencing

Strength, durability, beauty and affordability. These are the qualities that have attracted design professionals to our Ornamental Steel Fencing for more than 20 years.

Our steel fences provide an elegant and affordable alternative to wrought iron. Installation is quick and easy because we ship our fence sections fully assembled, with rail brackets mounted to posts. Pickets are attached to the rails with industrial drive rivets, which adds strength and stability, while allowing

racking to accommodate uneven ground surface. The INTREPID line features the flexibility of 10 popular two, three, and four-rail design styles to choose from - all in a variety

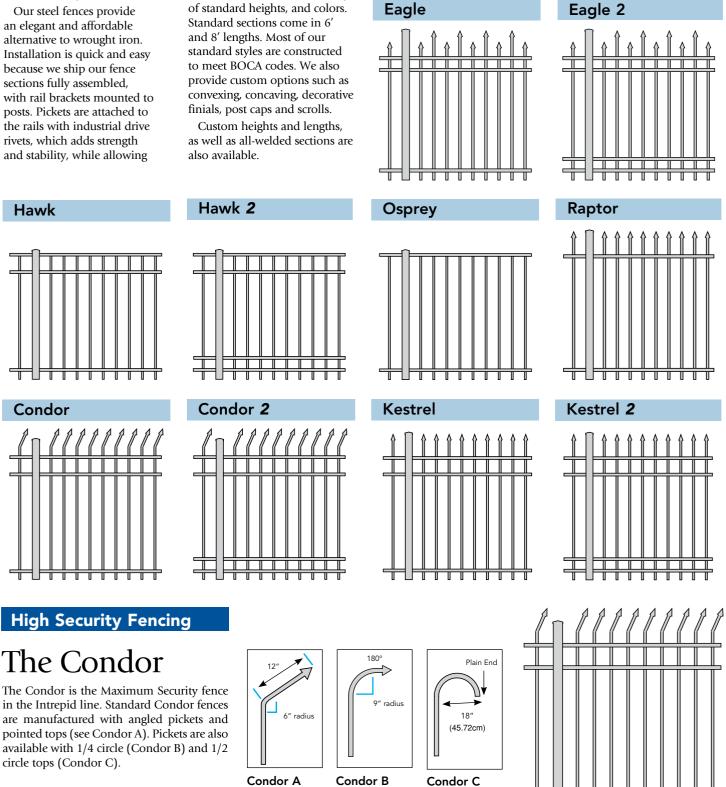
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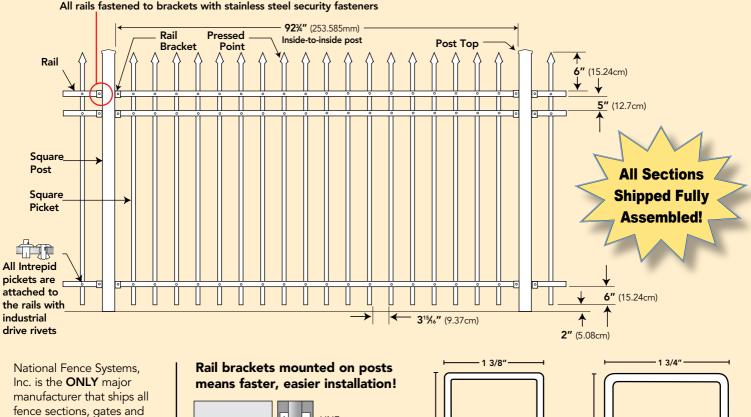
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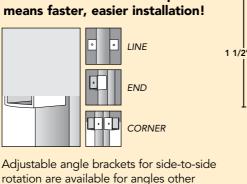
Designed for Ease of Installation!

National Fence Systems, Inc. has engineered the Intrepid Line for efficient, trouble-free installation. All of our sections are shipped FULLY ASSEMBLED; and all brackets are MOUNTED TO POSTS as a standard.





Inc. is the ONLY major manufacturer that ships all fence sections, gates and posts fully assembled. <u>Rail</u> <u>brackets are attached to the</u> <u>post, and then polyester</u> <u>coated after fabrication.</u> <u>No assembly is required.</u> Our sections are fastened with aluminum industrial drive rivets – allowing sections to rack up to 20% to allow for uneven ground.





1 3/4

Intrepid Fences are shipped with all rail brackets pre-mounted on posts.

Kolor King[®] Super Durable Polyester Powder Coatings

than 90%.

Exclusive high-performance coating system makes our ornamental steel fences virtually maintenance-free.

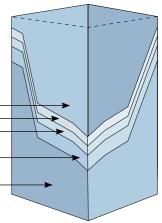
All Intrepid Ornamental Steel Fencing systems are coated with our Kolor King® high performance polyester powder coating, designed for the harshest outdoor weathering environments. Formulated for the toughest marine and architectural applications, the Kolor King Super Durable Polyester Coating delivers up to *double the exterior durability for gloss and color retention*. In addition, the Super Durable Polyester Coating has demonstrated a 30% improvement in corrosion resistance in acid rain environments – compared with <u>standard TGIC polyester powder</u> <u>coatings</u>.

High-Performance

This high performance coating has been formulated to meet the AAMA 605 High Performance Specification and to meet or exceed AAMA 2604 and the European Qualicoat Standard. These coatings are very smooth, as would be expected in an architectural application. They come in a variety of colors, gloss, metallics, and clear.

- A. Galvanized Inside
- B. Steel Framework
- C. Galvanized Outside
- D. Zinc Phosphate/Chromate Conversion Coating ——
- E. Bonded Polyester Powder Coating __

Extra Strong Bonded Framework



Intrepid Swing Gates

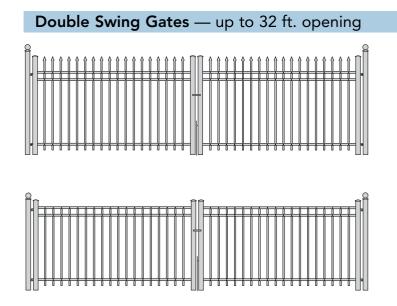
All INTREPID swing gates are constructed to the highest standard in the industry, with 2"x 2" (5.08 x 5.08cm), 14gauge steel uprights standard on residential and commercial gate frames.

All gate frames and pickets are shipped fully assembled, and are welded at all joints for added strength.

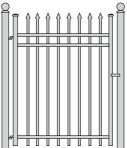
See page 6 for decorative options.

Choose any style!

We have pictured below the most popular styles of gates. In addition to these styles, National Fence Systems, Inc. manufactures gates to match every fence style. Custom gate styles and accessories are also available.



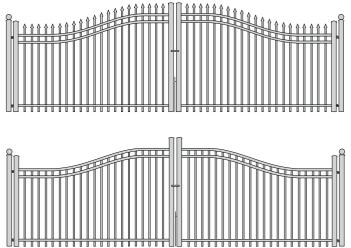
Single Swing Gates



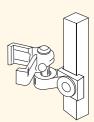








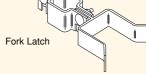
Swing Gate Hardware



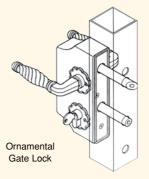


Male Pin Hinge

Double Swing Gate Hinge



Optional Gate Hardware





Deadbolt Lockbox -Single or Double

EasyGlide Cantilever Gates

SLIDE GATES

INTREPID utilizes the exclusive EasyGlide[™] Aluminum Track system for all of our cantilever ornamental steel gates. This system, featuring a fully enclosed, high performance aluminum track provides smooth gate operation with limited lateral movement.

INTREPID Ornamental Steel Fence Systems are backed by a 10 year limited warranty. Let our knowledgeable and helpful staff of experts help you choose the perfect style for your home or business.

Aluminum Track Gate Systems

- Fully enclosed high performance aluminum track (6061T6)
- To provide for smooth operation gate rides on tracks utilizing a sealed ball bearing system and horizontal wheels in the truck assembly
- Lower guide system and horizontal wheels in track assembly effectively limit lateral movement
- Single gate openings up to 30' and double track gates available up to 36'; Technical and design assistance can be provided upon request.

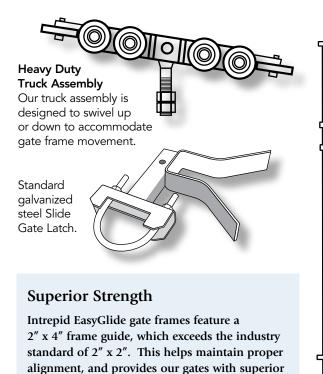
All of Stainless Steel Arcraft Cable

All Slide Gates Shipped Fully

Assembled!

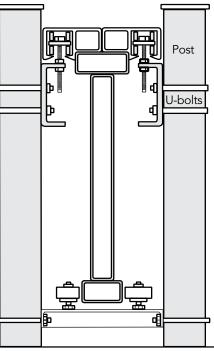


Box gates also available for up to 40' openings.

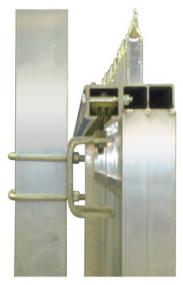


strength and dimensional stability.



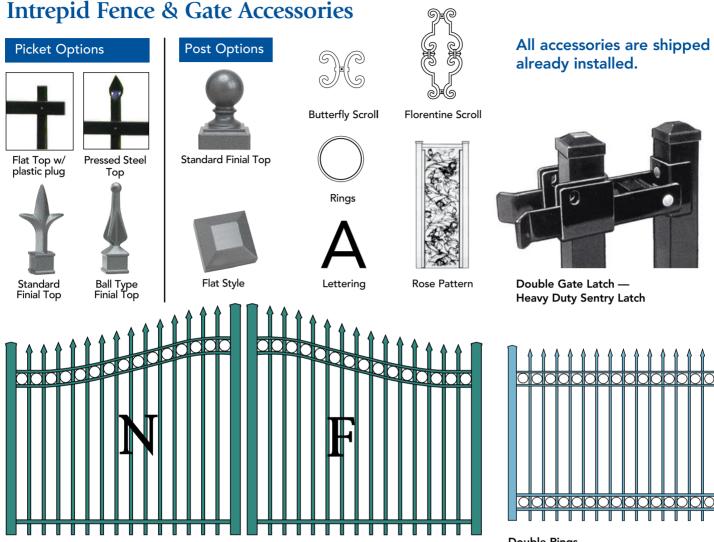


EasyGlide Single Gate Track



For gates from 3 ft. up to 30ft.

For gates up to 36ft.



Accessories

Simple accessories like rings and lettering add elegance to a standard curved double swing gate.

Double Rings

Double rows of rings are a popular accessory item to dress up a simple straight-picket fence.

Kolor King[®] Colors

In addition to the standard colors below, Intrepid Ornamental Steel fences are also available in over 40 additional "standard" colors.

Hammertone Black



Hammertone Silver



Hammertone Green



Green



White



Bronze

Intrepid Fence & Gate Accessories

Material - Picket, Rails, Posts

•*Vertical Steel Pickets* are made of hot rolled structural steel with a minimum tensile strength of 50,000 psi. Pickets are manufactured as per ASTM A513 and hot dipped galvanized as per ASTM A525-G90.

Space between pickets shall be 315/16" (10.001cm) face to face.

•*Horizontal Steel Rails* are made of roll-formed structural steel with a minimum tensile strength of 50,000 psi. into a channel. Rails are manufactured as per ASTM A513 and hot dipped galvanized as per ASTM A523-G90.

•*Steel Posts* are made of hot rolled structural steel with a minimum tensile strength of 50,000 psi. Posts are manufactured as per ASTM A513 and hot dipped galvanized as per ASTM A525-G90.

Accessories

All Decorative Finials, Rings, Lettering, Post Caps, Ball Caps and Scrolls are made die cast aluminum, per ASTM A319.

Fabrication

- Rails are punched to allow pickets to pass through the rail. The number of rails vary with style, height and strength as determined by National Fence Systems, Inc.
- Pickets, as a standard, are riveted or may be, as an option, welded to rails. Pickets are riveted to rails using a 1/4" industrial aluminum drive rivet.
- All fence sections, gates and posts are shipped fully assembled; posts having the rail brackets attached first and then polyester coated after fabrication. No assembly is required. Unassembled sections and blank posts are available upon request.
- Posts are manufactured with post rail brackets mounted for easy installation. The post rail bracket is fastened to each end, line, and/or corner post and is polyester coated after fabrication.

Intrepid Residential Ornamental Steel Fencing

ltem	Size (sq.)	Wall Thickness	Wgt/ft. (lbs)	Tensile Strength (psi)	
Picket	¾″ (1.095cm)	18 ga (.047)	.467	50,000	
Rail (U-channel)	1¾″x1½″ (3.49x3.81cm)	14 ga (.083)	1.134	50,000	
Post Options					
Post (option 1)	2" (5.08cm)	14 ga (.083)	2.164	50,000	
Post (option 2)	2 ½″ (6.35cm)	14 ga (.083)	2.728	50,000	

Intrepid Industrial Ornamental Steel Fencing

ltem	Size (sq.)	Wall Thickness	Wgt/ft. (lbs)	Tensile Strength (psi)		
Picket Options						
Picket (Option 1)	1" (2.54cm)	18 ga (.047)	.634	50,000		
Picket (Option 2)	1" (2.54cm)	16 ga (.065)	.827	50,000		
Picket (Option 3)	1" (2.54cm)	14 ga (.083)	1.035	50,000		
Rail (U-channel)	1¾"x1¾"(4.45x4.45cm)	11 ga (.120)	2.20	50,000		
Post Options						
Post (option 1)	2 ½" (6.35cm)	14 ga (.083)	2.728	50,000		
Post (option 2)	3" (7.62cm)	11 ga (.120)	4.288	50,000		
Post (option 3)	4" (10.16cm)	11ga (.120)	6.332	50,000		

• Gates are fabricated using the same components as for the complete fence system. All Gates are welded first and then polyester powder coated after fabrication. Type of gates available: single, double drive, and cantilever aluminum track. Hinges and latches are fitted according to gate size and mode of usage. Various Gate operators can be installed on all gates.

Finish

All fence components have a galvanized undercoat, inside and outside all members, to insure maximum corrosion resistance.

The complete fence system is coated using our environmentally approved Kolor King[™] Super Durable High Performance Powder Coating process (see page 3).

Installation

Gate posts should be posted according to gate openings specified. Fence Posts are to be set at a spacing of either 71" for 6' o.c nominal or 95½" for 8' o.c. nominal with 2½" square posts. Fence Panels should be attached into the mechanically fastened post rail bracket on each post and fastened with a stainless security fastener. Adjustable angle brackets available for installation on uneven terrain.

Manufacturer

National Fence Systems, Inc. 1033 Route 1 South Avenel, New Jersey 07001 1-877-484-6953

Kolor King[®] 10-Year Limited Warranty

Kolor King[®] warrants to the original purchaser of the fencing that the electrostatically applied powder coated finish will not crack, chip, or peel for a period of 10 years from date of installation or purchase. This warrantee does not extend to damage caused by use other than the normal use for which the fence is intended, negligence, alteration, accident, improper installation, abuse, misuse, vandalism or acts of god. Excluded from the warranty are points of welding inherent in the style of fence or otherwise requested by the purchaser.

All claims for a breach of this warranty shall be submitted to Kolor King in writing describing the nature of the breach together with a photograph of the defective portion of the fence and a copy of the original installation agreement or invoice. Kolor King reserves the right to determine is the claim is valid. If the claim is valid, Kolor King shall, at its discretion, either repair or replace the defective portion of the fence. However, all removal, shipping, and reinstallation cost are the sole responsibility of the purchaser.

The above set forth Kolor King complete warranty and the remedies against Kolor King with respect to the fence. No ADDITIONAL WARRANTIES ARE GIVEN, EXPRESS, STATUTORY OR IMPLIED, ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXPRESSLY DISCLAIMED. KOLOR KING shall not in any event be responsible for consequential, personal injury, or incidental damages. No person or entity is authorized to change, modify or supplement this warranty, and any such attempt and any other written or implied agreement shall not be valid as against Kolor King.

Industrial Steel Ornamental Fencing Specifications

PART I GENERAL 1.01 SECTION INCLUDES A. Steel Ornamental picket fencing.

1.02 SUBMITTALS

A. Changes in specifications may not be made after the published date of bid. All submittals of substitutions must be approved before bid date.

B. Shop drawing of fences and gates with all dimensions, details, and finishes. Drawings must include post foundations.

C. Product data: Manufacturer's catalog indicating materials and a letter certifying that all conditions of the specifications have been met.

PART 2 PRODUCTS 2.01 MANUFACTURER

A. Products from other qualified manufacturers who have five years or more experience manufacturing steel ornamental picket fencing will be considered by the architect as equal if they meet all specifications for design, size gauge of metal parts and fabrication.

B. Picket fences and gates must be obtained from a single source.

C. Approved Manufacturer: National Fence Systems, Inc. 1-877-484-6953.

2.02 ORNAMENTAL PICKET FENCE Style: _____ Height: _____

A. Pickets: Made of galvanized steel tubular members, galvanized inside and outside of tube per ASTM A-787-G90 zinc coating, 0.90 oz/ft2 (0.27 Kg/m2). Steel to have 50,000 psi (310 MPa) yield strength. Picket size _____" (_____ mm). Pickets spaced 3-15/16" (100 mm) face to face. Pickets attached to rails using 1/4" (6 mm) industrial drive rivets. Wall thickness of pickets _____ gauge [_____ " (mm)] B. Rails: "U" channels - 1-3/4" (44.45 mm) x 1-3/4" (44.45 mm). Wall

thickness 11 gauge [120'' (3.05 mm)].

Manufactured per ASTM A653 with a 50,000 psi (344 MPa) yield strength. Galvanized: G90 coating 0.90 oz/ft2 (0.27 Kg/m2). Rails mechanically punched to receive pickets and rivets. Attach rails to brackets using 2 each 1/4" (6 mm) industrial drive rivets. Steel manufactured per ASTM A446.

C. Posts: Made of galvanized steel tube, galvanized inside and outside, produced per ASTM A-787-G90 zinc coating, 0.90 oz/ft2 (0.27 Kg/m2), steel to have 50,000 psi (310 MPa) yield strength. Post size ______" (_____" mm). Posts to have _____" gauge wall thickness ______" " (_____" mm) weighing _____" lb/ft[(_____" Kg/m)

D. Super Durable High Performance Finish: All primary components receive a thorough cleaning and pre-treatment (an iron phosphate pre-treatment to promote adhesion and a non-chromate conversion coating to seal the surface and provide additional corrosion protection.) A super durable high performance polyester powder coating is applied by electrostatic spray method to a thickness of 3 mils (0.0762 mm) and baked at 400° F (204° C) until cured.

2.03 ACCESSORIES

A. Industrial drive rivets hold pickets to rails and rails to brackets. Rivets must have a sheer strength of 1,500lbs. and a holding power of 1,100lbs.

B. Heavy duty hot dipped galvanized pre-mounted rail brackets.

C. Post Caps: Cast aluminum or malleable iron or formed steel manufactured to form a weather-tight closure. Caps to be _____ style on all posts. (Choose ball type or flattops.)

D. Rings: Cast aluminum rings attached to rails by insertion of mounting block into upper rail. Rivet ring to rail. Ring to be secure and unremovable.

E. Finial Tops for Pickets: Cast aluminum, attached to pickets by 1/4" (6 mm) rivet. All Finials extend 6" (150 mm) above rail. F. Picket Tops: (pick one)

- 1. Pressed Steel-pointed Pickets.
- 2. Standard Finial Top.
- 3. Ball-type Finial Top.
- 4. Flat Top Pickets with Plugs.

2.04 GATES

Ornamental picket swing gates (see section 02832 PIC SU) Ornamental picket cantilever slide gates (see section 02832 PIC CS)

2.05 SETTING MATERIALS

A. Concrete: Minimum 28 day compressive strength of 3,000 psi (20 Mpa).

B. Flanged Post: Provide flanged base plates with 4 holes for surface mounting where indicated. (For wall mount or pad mount situations.)

PART 3 EXECUTION 3.01 EXAMINATION

A. Verify areas to receive fencing are completed to final grades and elevations.

B. Property lines and legal boundaries of work to be clearly established by the general contractor or property owner.

3.02 FENCE INSTALLATION

A. Install fence per manufacturer's recommendations.

B. Space posts uniformly at _____ (_____ mm) face to face unless instructed otherwise.

C. Set posts in concrete. Dig holes having a diameter 4 times the diameter of the post, and 6''(152 mm) deeper than the bottom of the post. Forms are not necessary or recommended. Crown concrete at top to shed water (except for tennis courts).

D. Check each post for vertical and top alignment.

E. Insert fully-assembled sections into pre-mounted brackets. Secure with stainless steel security fastener.

3.03 INSTALL AND SECURE POST TOPS 3.04 CLEANING

A. Clean up debris and remove from the site.

Call today for a complete list of our manufacturing specifications.



1033 Route One ■ Avenel ■ New Jersey 07001 ■ phone:732-636-5600 fax: 732-636-5605 ■ email: info@nationalfencesystems.com www.intrepidsteel.com

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