

Monumental Iron Works™



NEW
Fully Assembled
Panels



Monumental Iron Works™

The Finest Ornamental Iron

Ornamental iron fences and gates have been the worldwide architectural choice for attractive security on public, commercial, industrial, and residential properties for hundreds of years. Monumental Iron Works™ fences and gates from Master Halco can be found throughout the country, adding beauty and security to these properties for their many owners. Combining tomorrow's modern technology with the elegance and craftsmanship of fencing forged by the hands of a master blacksmith of years gone by, Master Halco is a unique ornamental fencing solution.

Monumental Iron Works fences and gates bring a combination of aesthetic elegance and security to residential, commercial, industrial, and institutional properties. Satisfy your architectural goals with a wide variety of options, designs and styles crafted for outstanding value. The quality of our materials manufactured to our high specification requirements, allows us to provide a durable, cost-effective fence system that will last for many years.

Crafted Elegance & Construction

Monumental Iron Works is a modular system, made up of many component parts designed to support each other. When completely assembled, these parts create one of the strongest ornamental

fence systems on the market. Using industrial rivets, the constructed panels have the solid look and feel of authentic ornamental iron. Because there is no welding, red rust problems that typically would destroy the integrity of the fence system and detract from its beauty are virtually eliminated, along with the semi-annual maintenance cost associated with repainting a welded system. Monumental Iron Works utilizes a duplex coating of polyester resin over hot-dip galvanized steel for corrosion protection, durability and a great appearance that lasts for years. A 15-Year Limited Warranty reinforces peace of mind in knowing you've selected the finest ornamental fence system available.

We offer a wide variety of modular products, including pre-assembled panels, gates, posts, finials, and tops in our standard black color. Select your Monumental Iron Works style and Master Halco will deliver the finest quality and highest value in ornamental picket fencing. Pre-assembled panels and matching gates are available in 2, 3 or 4 rail systems ranging in heights from 3' to 8'. Choose from the traditional Imperial Styles, the classic Estate Styles, or the security of the Fortifier Style. Monumental Iron Works ornamental picket fences and gates complement any architectural design, while providing distinction as well as security.

Top 3 Reasons to Buy Monumental Iron Works

1 IN-STOCK

- Ready for quick ship delivery to your local Master Halco distributor branch

2 LABOR & TIME SAVINGS

- Pre-assembled panels for faster installations
- Patented Pro-Arc™ brackets adjusts 30 degrees up/down/left/right for easy field installation tolerances

3 LOW MAINTENANCE

- UV and weather resistant powder coating applied to individual pieces BEFORE assembly to better resist cracking, flaking and peeling at the panel's pivot points
- Constructed with industrial drive rivets to eliminate potential red rust problems associated with welded systems

Partial List of MIW Installation Sites

Colleges and Universities:

Yale University
Harvard University
Stanford University
Drexel University
Johns Hopkins University
West Point
Air Force Academy
Georgia Tech
University of Alabama
University of Maryland
University of Pennsylvania
University of Toledo
Old Dominion University
William & Mary College
Holyoke College

Municipal and Government Projects:

FBI Headquarters
Social Security Administration
U.S. Post Office
Library of Congress
National Arboretum
World Trade Center, Baltimore
Federal Hill Park
Chicago Parks
Oriole Park at Camden Yards
V.A. Cemeteries
Philadelphia Naval Yards
Aberdeen Proving Grounds
HUD Housing Projects
JFK Airport
Philadelphia Airport
Newark Airport
Tampa Airport

Estate Properties:

Custom Built Homes
Executive Homes
Residential Homes

Other Institutions:

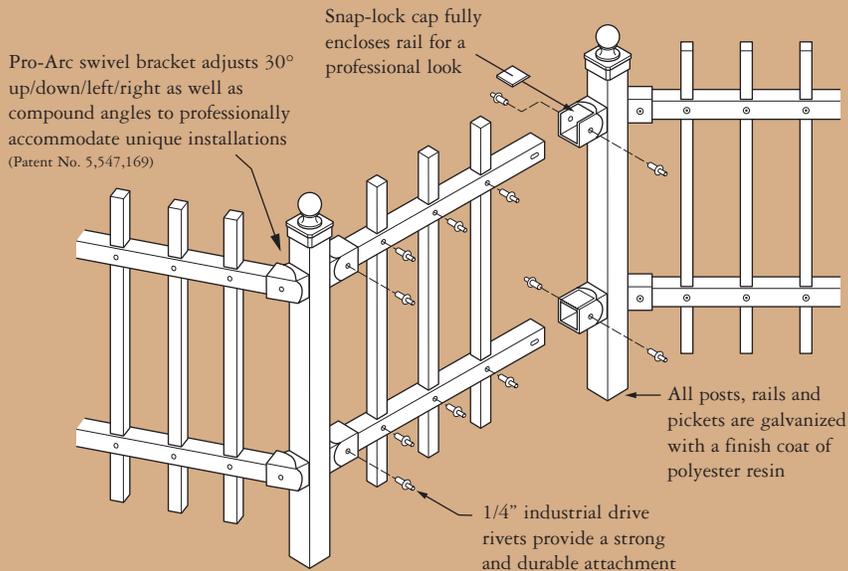
The Church of Jesus Christ of Latter Day Saints
Cleveland Plain Dealer
Baltimore Sun News Papers
Glaxo
Eli Lilly
Ameriflora
Max and Erma's Restaurants
Marion Merrel Dow



Shown: Imperial D-Modified style with flat post caps

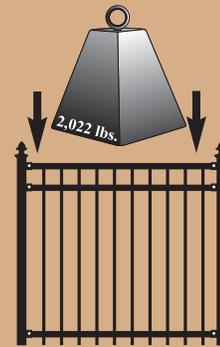
Monumental Iron Works™

Superior Construction & Strength



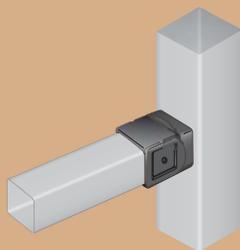
A leading university's independent lab tested our fence's strength. They found, before failure, we held up to:

- 2,022 lbs. of vertical download
- 1,021 lbs. of horizontal load



Pro-Arc™ Brackets

The patented bracket fastens panels to the posts using a bolt-thru design for added strength and security. By swiveling 30° in any direction it allows for grade and layout changes. The fully enclosed bracket is very user-friendly allowing for field installation tolerances while providing a finished look from unsightly rail cuts, short sections, and biased panels.



Industrial Drive Rivets

To increase panel strength, industrial drive rivets with 1,100 lbs. of holding power and 1,500 lbs. of sheer strength fasten each picket to the rails giving the system the solid look and feel of traditional ornamental iron. Fastening each picket to the rails creates an integral structure that provides fixed-point loading and spreads any vertical or horizontal force over the entire section. This avoids the possible drawbacks of welding, such as weakened metal that can cause pickets to tear away from the rails or the burn-off of galvanized coating which can lead to rust.

Coating

A duplex coating of polyester resin over hot-dipped galvanized steel ensures a long, low-maintenance life. Coating before assembly-instead of after-provides an even, smooth finish that resists cracking, flaking and peeling at the panel's pivot points. This gives a full measure of protection in the areas where moisture accumulates and rust begins.

Installation

All pickets, posts and rails are pre-drilled for fast, user-friendly assembly and installation. This also reduces the chance of errors that result from drilling holes during field installation.

Pickets

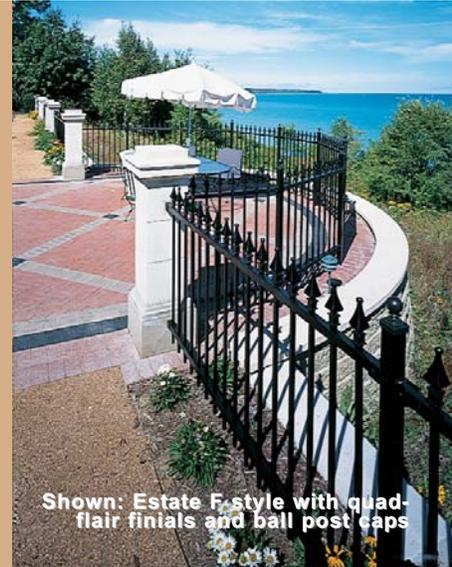
Steel pickets are 3/4" square and have a 16 gauge wall thickness, with the exception of the Fortifier B pickets which are 1" square with 14 gauge wall thickness. Each picket is riveted to the rail for maximum strength. For design flexibility and to customize your fence, choose from three picket tops.

Posts

Factory pre-drilled holes permit fast field installation while minimizing any compromising of the powder-coated finish. Steel posts are available in several sizes for almost any application. Posts can be flange-mounted on walls and concrete pads, or set into sleeves.

Rails

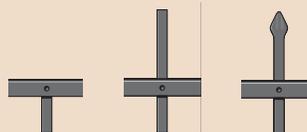
Exceptionally strong, polyester coated 11 gauge 1-1/2" x 1-3/8" x 8' galvanized steel "U" rails hold up in high traffic areas. The self-draining "U" design prevents moisture from collecting, offering maximum protection against rust. Pre-punched slotted rail holes allow for speedy alignment and easy rivet attachment of the rail to the Pro-Arc bracket.



Configurations & Options



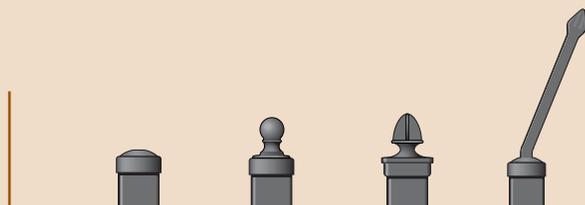
Fencing and Matching Gates Distinctive Estate, Imperial and Fortifier styles to choose from. Available in 2-, 3- or 4-rail at heights from 3' to 8'.



Picket Tops Choose from Flush Top, Picket Top or Spear Top pickets.



Finials Choose from Triad, Quad-Flair or Fleur-de-lis finials.



Post Caps Choose from Flat, Ball, Acorn or Spear Top (for Fortifier B).



Post Available in 2-1/2" and 3" square.



Colors Black

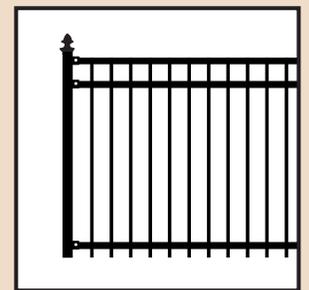
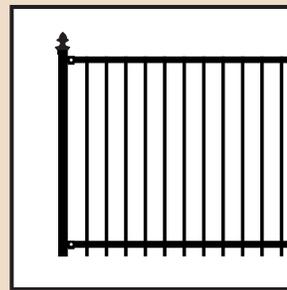
Imperial Style Panels and

The design of our Imperial style is based on traditional iron picket fences dating back to 1892. Long accepted as an outstanding value because of their quality construction, durability, numerous options and affordable pricing, Imperial fences and gates by Monumental Iron Works™ provides an exceptional ornamental picket fence system where elegant simplicity is desired. With pickets spaced 3-15/16 inches apart, Monumental Iron Works fences offer a high degree of security while preserving the practicality and charm of a traditional picket fence. Imperial style is an ideal choice where a combination of strength and classic appearance is desired.



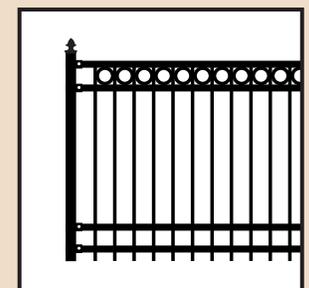
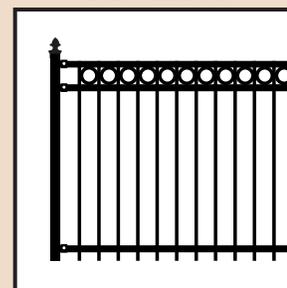
Imperial A

Imperial B



Imperial D
Modified

Imperial D

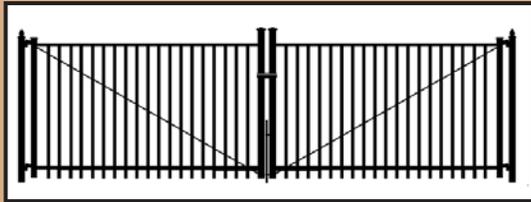


d Gates

Imperial A

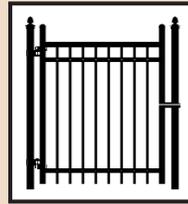


Single

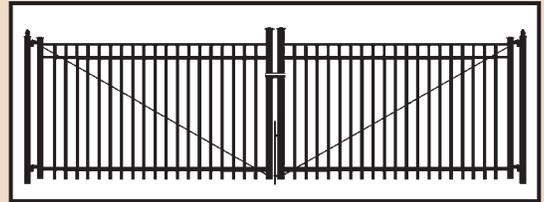


Double

Imperial B



Single



Double

Imperial D-Modified

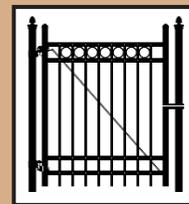


Single



Double

Imperial D



Single



Double

Estate Style Panels and Gates

Estate A and B

Monumental Iron Works™ Estate style with spear top pickets are reminiscent of very early English and European ironwork. The style is contemporary in design and noted for its spear like appearance. The spear top pickets add attractive security and distinction to any architectural design.

Estate F and G

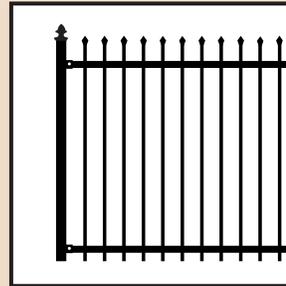
Estate style with finial top options is one of the more ornate styles that Monumental Iron Works offers. The three distinctively ornate finials, triad, quad-flair and fleur-de-lis, add old world charm and dignity to any property.

Estate K and L

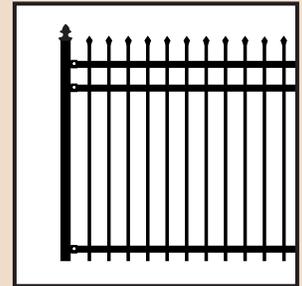
Estate style with picket top is the most contemporary and classic look offered in the Estate series.

Good looking and long lasting, these styles will enhance the beauty and value of any property. Every Monumental Iron Works fence provides lasting beauty and performance. All components are engineered for strength, security and low maintenance.

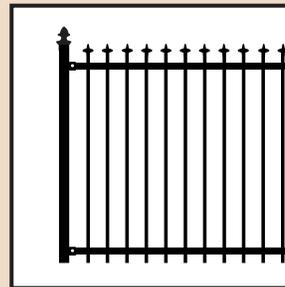
Estate A



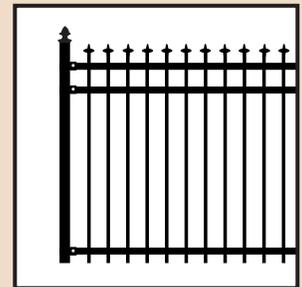
Estate B



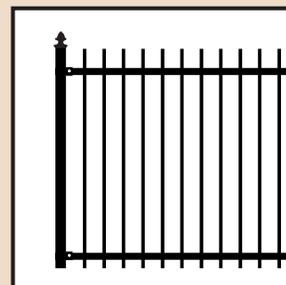
Estate F



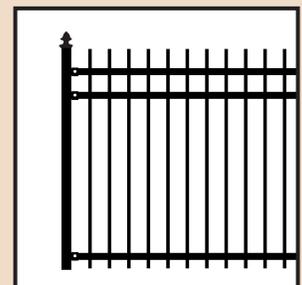
Estate G



Estate K



Estate L

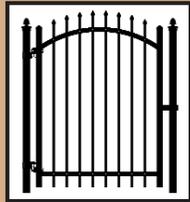


Shown: Estate F style with triad finials and acorn post caps

Estate A



Single



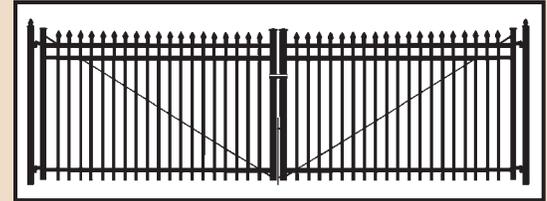
Estate B



Single



Double



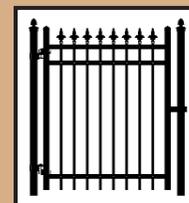
Double

Estate F

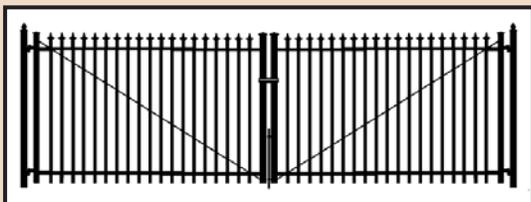


Single

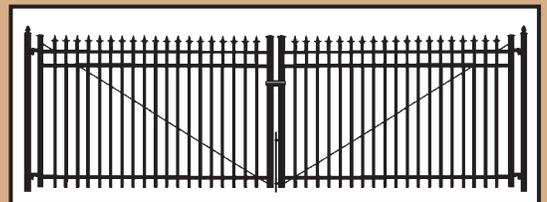
Estate G



Single



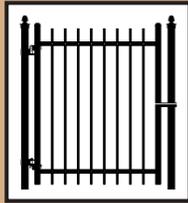
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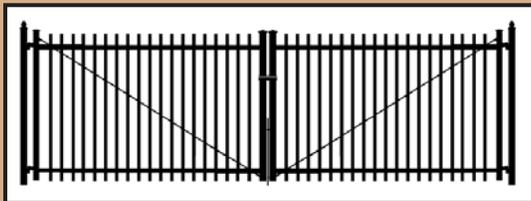
Double

Estate Gates (Cont.)

Estate K

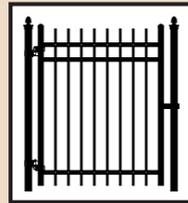


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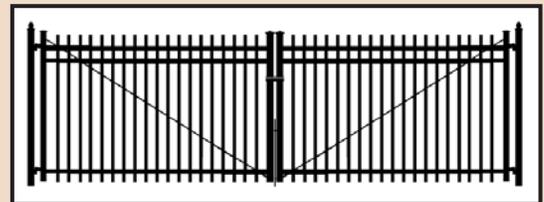


Double

Estate L



Single

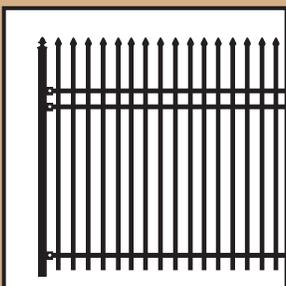


Double

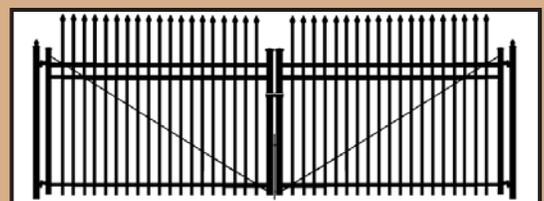
Fortifier Style

Monumental Iron Works™ Fortifier style with spear top pickets is designed to give maximum security and protection. Pickets are 1" square and have a 14 gauge wall thickness. Optional post caps with spear top pickets can be added to end, corner or line posts for extra security.

Fortifier B



Single



Double



Shown: Fortifier B style with acorn post caps

Basic Specifications

1.1 **SCOPE:** This specification covers materials and construction requirements for Ornamental Picket Fence.

1.2 **MATERIALS:**

A. **PICKETS:** Galvanized square steel tubular members manufactured per ASTM A 787, having a 45,000 psi (310 MPa) yield strength and G90 zinc coating, 0.90 oz/ft² (0.27 kg/M²). Space pickets 3-15/16" maximum (100 mm) face to face. The size and wall thickness are listed below.

SIZE	WALL THICKNESS	WGT. PER FT.*	YIELD STRENGTH
3/4" Sq.	16 ga.	0.580 lbs.	45,000 psi
1" Sq.	14 ga.	1.035 lbs.	45,000 psi

B. **RAILS:** 1-1/2" (38 mm) x 1-3/8" (38 mm) x 1-1/2" (38 mm), 11 gauge (0.120" 3.05 mm) wall thickness steel "U" channel per ASTM A 653 or ASTM A 607, having a 50,000 psi (344 Mpa) yield strength and G90 zinc coating 0.90 oz/ft² (0.27 kg/M²).

C. **POSTS:** Galvanized square steel tubular members manufactured per ASTM A 787 having a 45,000 psi (310 MPa) yield strength and G90 zinc coating, 0.90 oz/ft². The size and wall thickness are listed below

SIZE	WALL THICKNESS	WGT. PER FT.*	YIELD STRENGTH
2-1/2" Sq.	14 ga.	2.639 lbs.	45,000 psi
3" Sq.	12 ga.	3.956 lbs.	45,000 psi

D. **RAIL BRACKETS:** Die cast of zink (ZAMAK #3 alloy) per ASTM B86-83Z 33521. Ball and socket design capable of 30° swivel (up/down-left/right). Bracket to fully encapsulate rail end for complete security that is aesthetically pleasing.

E. **FINIALS (Estate F and G):** Cast aluminum.

F. **RINGS (Imperial D and D-Modified):** Cast aluminum.

1.3 **ASSEMBLY:**

A. All panels are pre-assembled.

B. Rails are attached to posts by means of rail brackets. Rail brackets are attached to posts using a 1/4" bolt and lock nut. Rails are attached to brackets using 1/4" industrial drive rivets.

C. 4" Rings (Imperial D & D-Modified) are pre-attached.

D. Attach Finials (Estate F and G) to pickets using a 1/4" industrial drive rivet.

1.4 **COATING:** Monumental Iron Works utilizes a duplex coating system of polyester resin over hot-dipped galvanized steel for maximum corrosion protection on all posts, pickets and rails. Fence sections are coated unassembled. (Coating of assembled sections is unacceptable).

All fence sections and components are given a 4-stage "Power Wash" pre-treatment process that cleans and prepares the metal substrate to assure complete adhesion of the powder coated finish.

Stage 1 - All metal substrate is CLEANED and PHOSPHATE treated simultaneously to form an AMORPHOUS STRUCTURE on the metal substrate for SUPERIOR POWDER COATING ADESHION.

Stage 2 - All metal substrate is given a thorough WATER RINSE to prepare the phosphate-coated metal substrate for the SEAL RINSE.

Stage 3 - All metal substrate is given an NON-CHROMATED seal for added corrosion protection and improved adhesion.

Stage 4 - All metal substrate is then baked dry, prior to the application of the POWDER COATING.

All metal substrate is given a polyester resin based powder coated finish applied by the electrostatic spray process to a minimum thickness of 2.5 (0.635 mm) mils. The polyester resin finish is cured in a 450 degree F (232° C) metal temperature for 20 minutes.

STANDARD COLOR- Black.

1.5 **SPECIAL WARRANTY:** Provide manufacturer's standard limited warranty that its ornamental fence system is free from defects in material and workmanship including cracking, peeling, blistering and corroding for a period of 15 years from date of purchase.

* Note: Weight Per Foot provided for reference only.



Shown: Fortifier B style with spear top post caps



Shown: Estate F style with quad-flair finials and ball post caps

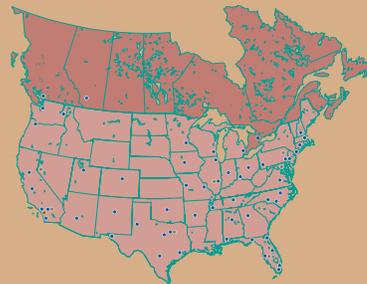
Shown on Front Cover: Estate G style with quad-flair finials and ball post caps

Local Commitment

Since 1961, Master Halco has grown to become the largest manufacturer and distributor of fencing materials in the world, servicing thousands of the best installers and retailers across the United States and Canada.



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Master Halco operates from locations across North America, with a vast network of distribution centers supported by our delivery fleet.