CLASSIC ORNAMENTAL
PREMIER™

INDUSTRIAL
ORNAMENTAL IRON FENCE SYSTEMS

MASTER HALCO™

Fencing Without Boundaries.™

CLASSIC ORNAMENTAL
PREMIER™

Master Halco's Classic Premier™ Industrial Ornamental fencing was specifically designed to meet the rigorous requirements of heavy commercial and industrial applications. Constructed of heavy-gauge galvanized steel and coated with a state-of-the-art, mar-resistant polyester powder-coat finish, this fencing offers a degree of strength, durability and corrosion resistance that is clearly premier. Engineered to maximize strength, the special shape of our Classic Premier rail is two to three times stronger than many other fence systems.

With six attractive styles and four colors to choose from, Classic Premier Industrial offers you the flexibility to design a fence that complements your design or application. All styles are available in heights up to 10 feet and all are available in six- or eight-foot lengths that rack to conform to slopes (Security style available in six-foot lengths only). Choose from two gate options; welded swing gates (single or double leaf) for pedestrian or driveway applications and aluminum cantilever gates for sliding gate applications.

Classic Premier Industrial is designed with ease of handling and installation in mind. Panels are supplied unassembled to avoid damage during shipping. Panel assembly is accomplished by a unique fastening system contained within the fence rails. Installation is performed entirely with bolts so that the integrity of the four-step coating is not compromised. Classic Premier Industrial comes with a 12-year limited warranty.* A warranty backed by Master Halco, one of the largest distributors and manufacturers of fencing materials in the world.

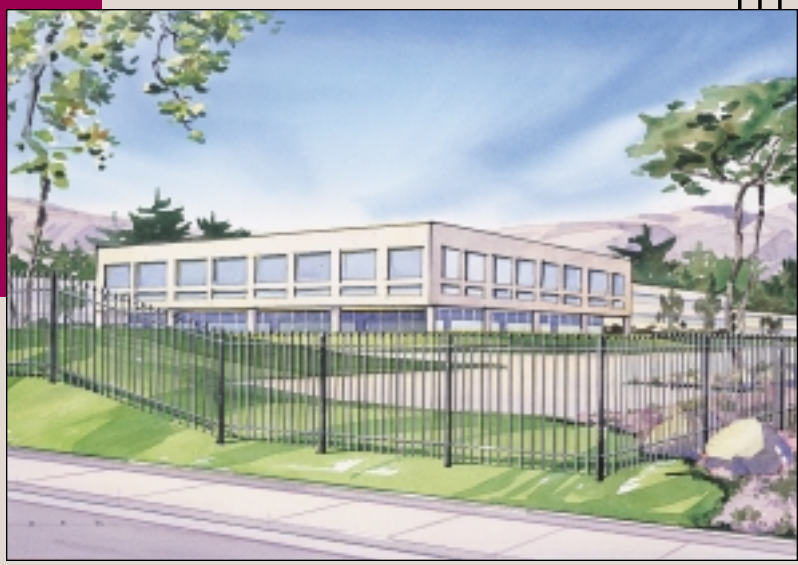
**See actual warranty for details.*

Universal

Simple, clean lines. A wonderful addition to landscaping, providing protection and style.

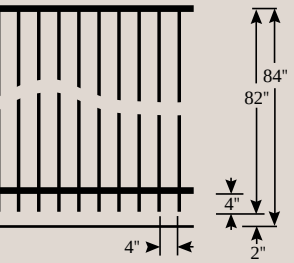
Spear

A traditional look, impressive and attractive.

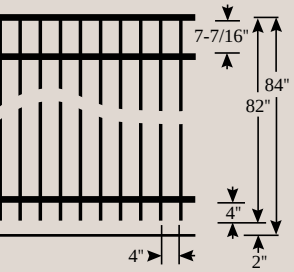


Security

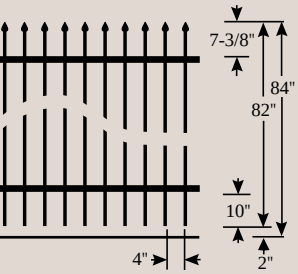
Foreboding, a deterrent to the would-be climber.



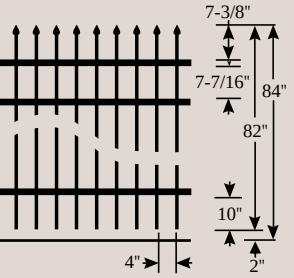
UNIVERSAL



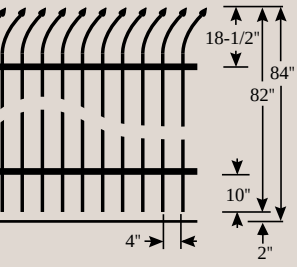
UNIVERSAL 3-RAIL



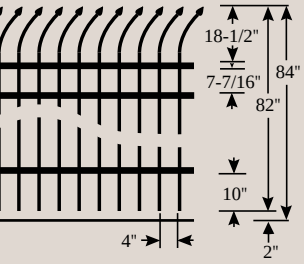
SPEAR



SPEAR 3-RAIL

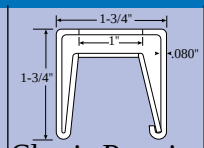
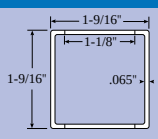
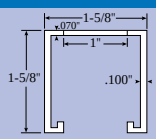
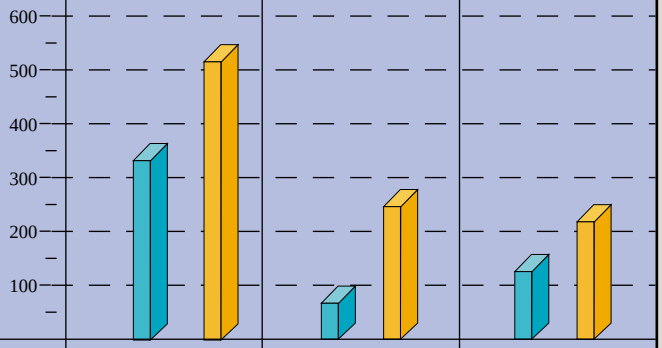


SECURITY



SECURITY 3-RAIL

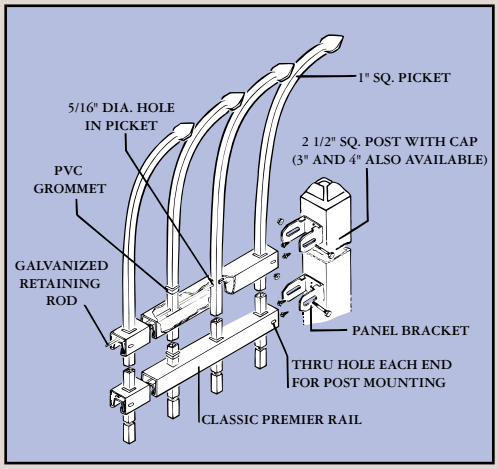
RAIL STRENGTH

Profile of the Architectural Shape of the Rail			 Classic Premier Rail (Steel)	 Square (Steel)	 U-Channel (Aluminum)
STRENGTH COMPARISON Applied lbs. at mid-span*					
Vertical Load Data	PVd = Vertical Design Load** @ .66 Fy	6' Span	446#***	112#	173#
		8' Span	334#***	84#	130#
Horizontal Load Data	PVd = Horizontal Design Load @ .66 Fy	6' Span	673#	348#	318#
		8' Span	505#	261#	239#
S_V = Section Modulus (IN^3) Vertical			.1624	.0816	.1350
S_H = Section Modulus (IN^3) Horizontal			.367	.190	.260
W = Rail Weight (LBS/FT)			2.55	1.37	0.54
F_y = Yield Strength			50,000	45,000	35,000

**** Values shown in graph are representative of the rails over an 8' span.***

***** Vertical Design Loads are per rail; for capacity of fence panel, multiply by number of rails.***

****** Vertical Design Loads include multiplying factor based on rigid connection of special bracket.***



Detail Illustration

WIND LOADING

Height (FT)	Rail Length	Post Size	Wind Load Capacity Factor (PSF)	Typical Wind Load Capacity (mph)
6	6	2-1/2" X 12GA	45.5	133
		3" X 12GA	54.6	146
	8	2-1/2" X 12GA	34.2	116
		3" X 12GA	41.0	127
7	6	2-1/2" X 12GA	33.4	114
		3" X 12GA	40.0	125
	8	2-1/2" X 12GA	25.0	99
		3" X 12GA	30.0	108
8	6	2-1/2" X 12GA	25.6	100
		3" X 12GA	30.7	110
	8	2-1/2" X 12GA	19.2	87
		3" X 12GA	23.0	95
9	6	3" X 12GA	24.0	97
10	6	3" X 12GA	21.6	92

Note: Mph calculated using ANSI/ASCE 7-88, "American Society of Civil Engineers Minimum Design Loads for Buildings and other Structures." Exposure Category B (Urban and suburban areas with closely spaced obstructions having the size of single-family dwellings or larger). For wind loading applicable to a particular specification, consult the appropriate Building Code.

Classic Premier™ Industrial Ornamental fencing is available in the following colors:

Black | Bronze | White | Desert Sand

AVAILABLE FOR RESIDENTIAL AND COMMERCIAL APPLICATIONS
CONTACT MASTER HALCO, INC. FOR DETAILS • (888) MH-FENCE

SALT SPRAY TEST - ASTM B117

Independent Test Lab Results:

Each of the specimens was scribed (ASTM D1654) with a cut through the coating to the bare metal. The specimens were then exposed to a 5% salt spray (ASTM B117) and evaluated periodically for degree of rusting and/or any change in the coating.

Specimen A was removed after 100 hours. Specimens B and C were removed after 300 hours. These three specimens showed the following results:

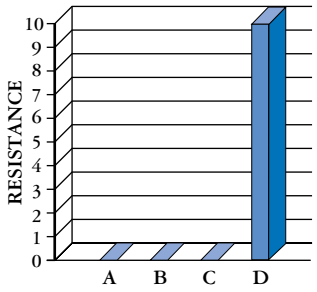
Specimens A, B and C - each of these specimens showed similar failure, the coating softened and blistered extensively and there was rust along the scribe line. When the specimens were scraped, the coating along the scribe line and on the blistered areas was easily removed. The creepage rating was a "0" for loss of coating (worst possible rating).

Specimen D was removed after 300 hours. The results were as follows:

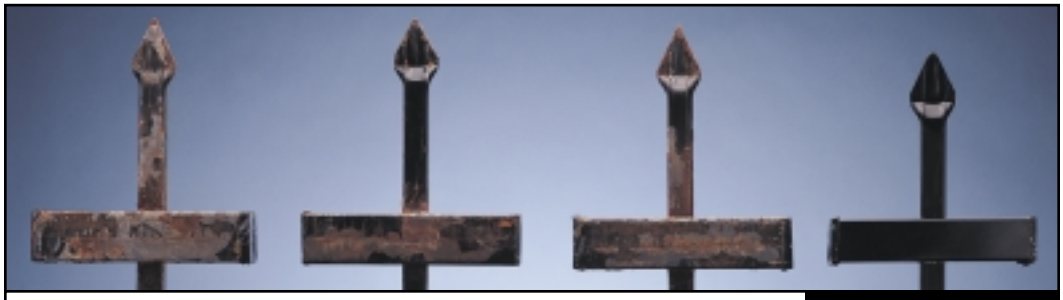
Specimen D - No rust and absolutely no coating removed! The specimen was in a condition similar to when it was first exposed to the salt spray, even after scraping! Classic Premier Industrial Ornamental received the best possible rating, "10"!

RESISTANCE TO CORROSION CREEPAGE

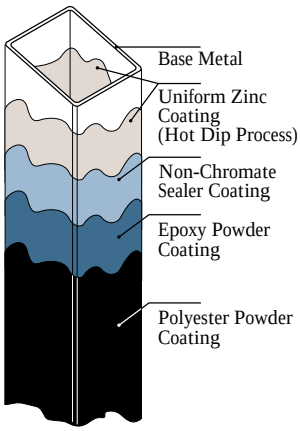
SPECIMENS RATED PER ASTM D1654



12-YEAR LIMITED WARRANTY



SPECIMEN A	SPECIMEN B	SPECIMEN C	SPECIMEN D
One coat of black paint over steel.	One coat of black paint over steel.	One coat of primer and one coat of black paint over steel.	Classic Premier™ Industrial epoxy and polyester powder-coating over galvanized steel.



Classic Premier™ Industrial 4-Step Coating

SPECIFICATIONS

Section 02830

Ornamental Iron Fencing

1.01 Work Included

The contractor shall provide all labor, materials and accessory items necessary for the installation of the ornamental metal fence system defined herein at (specify project location).

1.02 Related Work

Section 022 _ _ Earthwork
Section 030 _ _ Concrete

1.03 System Description

The manufacturer shall supply a total ornamental fencing system of the design, style, strength and picket spacing defined herein. The system shall include all components; pickets, rails, posts, gates and hardware as required.

1.04 Quality Assurance

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

1.05 References

ASTM A513 - Standard Specifications for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing.

ASTM A526 - Specifications for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality.

ASTM B117 - Standard Test Method of Salt Spray (Fog) Testing.

ASTM D1654 - Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.

1.06 Submitted

Product literature and warranty shall be submitted prior to installation to confirm compliance with the requirements for the materials specified in this section.

1.07 Product Handling and Storage

Upon receipt at the jobsite all materials shall be inspected to ensure that no damage has occurred during shipping. Materials shall be stored in such a manner as to preclude damage, vandalism and theft.

2.01 Supplier

The ornamental metal fencing system shall conform to Master Halco Classic Premier Industrial Ornamental _____ style (specify style from options in current Classic Premier Industrial Ornamental literature).

2.02 Materials

A. All primary fence components; pickets, rails and posts shall be manufactured from coil steel having a yield strength of 50,000 psi.

B. All primary fence components; pickets, rails and posts shall be galvanized by the hot dip process to meet the requirements of ASTM A526 and shall have a minimum zinc coating thickness of .90 oz/sq. ft. (coating designation G90).

C. Pickets shall be 1" sq. 16 ga., cold rolled steel tubing manufactured per ASTM A513.

D. Rails shall be made of 14 ga. cold rolled steel. The cross-sectional shape of the rails shall conform to the manufacturer's Classic Premier rail design. The cross-sectional outside dimensions of the rails shall be 1-¾" sq. Each rail shall have a minimum weight of 2.55 pounds per square foot.

E. Posts shall be 2-1/2" sq., 12 ga., cold rolled steel tubing manufactured per ASTM A513.

2.03 Finish

A. Galvanized steel fence components shall be subjected to a six-stage wash and pre-treated system which includes a zinc phosphatizer and a non-chromate sealer.

B. Galvanized steel fence components shall then receive a two-step powder coating applied by the electrostatic spray process. The base coat shall be a thermosetting epoxy powder coating with a minimum coating thickness of 2-4 mils. The top coat shall be a mar-resistant TGIC polyester powder coating with a minimum coating thickness of 2-4 mils.

C. Color shall be _____ (select option from current Classic Premier Industrial Ornamental literature).

D. Coated galvanized steel fence components shall be capable of withstanding 3500 hours of salt spray testing, without loss of adhesion, as specified in ASTM B117.

2.04 Fabrication

A. Pickets, rails and posts shall be cut to specified lengths. Rails shall be punched to accept pickets. Pickets shall be drilled to accept retaining rods. Cutting, punching and drilling shall be done prior to coating to facilitate assembly without compromising the integrity of the finish.

B. PVC grommets shall be inserted into the pre-punched holes in the rails. Pickets shall be inserted through the grommets so that the pre-drilled holes in the pickets align with the internal upper raceway of the rails.

C. A 1/8" diameter galvanized steel retaining rod shall then be inserted into the upper raceway of the rails through the pre-drilled holes in each picket.

D. Completed sections shall be capable of supporting a 600 pound load at mid-span without permanent deformation. Completed sections can rack up to 24" in 8' or 18" in 6' (14°).

E. Posts shall have a square cap firmly affixed to the extending end.

F. Gates shall be fabricated using the same materials as for the complete fencing system, gate framework shall have the same cross-sectional dimensions as the panel rails. All intersections of gate material shall be joined by welding.

2.05 Warranty

A. The ornamental metal fence system shall include a written 12-year limited warranty against defects in materials and workmanship.

B. The ornamental metal fence system shall include a written 12-year limited warranty on the coating against cracking, chipping, blistering, peeling or corroding. Refer to warranty certificate for complete details and limitations.

3.01 Preparation

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

3.02 Installation

A. Set fence posts at (specify 71-3/4" o.c. ± 1/2" for 6' o.c. nominal with 2-1/2" sq. posts or 96" o.c. ± 1/2" for 8' o.c. nominal with 2-1/2" sq. posts). Set gate posts for gate opening specified in the construction drawings. Posts shall be placed a minimum of 36" into the ground and set in concrete.

B. Attach fabricated panels to posts using brackets supplied by the manufacturer.

C. Install gates by attaching hardware supplied by the manufacturer.

3.03 Cleaning

Contractor shall clean the jobsite of construction debris.

Specifications subject to change without notice.

MASTER HALCO™

For more information, contact our
Customer Service Department:
1-888-MH-FENCE (toll-free)
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