SPECIFICATIONS

Section 02825 - Ornamental Fences and Gates

Spec-Data Sheet

PRODUCT NAME Ultra Aluminum Industrial Picket Fence

2. MANUFACTURER Ultra Aluminum Mfg., Inc 2124 Grand Commerce Drive Howell, MI 48855 Tel: (517) 548-6693 Toll-Free: (800) 656-4420

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3. PRODUCT DESCRIPTION

Basic Use: To provide attractive, maintenance-free security for residential, commercial, industrial, municipal and recreational applications. The Ultra Aluminum Picket Fence is the ideal choice whenever there is a need for security and protection that complements the architectural or landscape design.

There are two strengths of the Ultra Aluminum Industrial Picket available:

Industrial, and Heavy Industrial. The Industrial and Heavy Industrial provide the maximum protection. Heavy Industrial is made up of a double rail design that allows for hidden fasteners and no exposed cavities under rail stock. See drawings below:

Composition and Materials: The Ultra Aluminum Picket Fence is manufactured from aluminum extrusions, having a minimum ultimate strength of 35,000 psi, using 6005 T5 alloy for structural components. All screws are stainless steel with a .003 plating of zinc and coated with yellow chromate to ensure corrosion resistance under the harshest conditions. The screw heads are painted two coats of polyurethane paint to match the finish of the fence.

Sizes: Industrial and Heavy Industrial strength fences are available in heights of 3', 4', 5', 6', 7', 8', and 10'. Gates are available in widths up to 12' for an 8' and 10' high fence and up to 20' for all other heights below 8' and 10'. *Colors:* The fence materials are coated with a TGIC polyester powder-coat finish for Industrial fence comes in Black (Pearl and Textured), White, Bronze, Beige and Green. Heavy Industrial is available in all five standard colors. Custom colors are available at an additional fee.

Styles: Six different styles are available for Industrial and Heavy Industrial.

4. TECHNICAL DATA

Pickets: The hollow pickets pass through the rails and are attached using stainless steel screws. By using this method of attachment, the pickets are always parallel, regardless of the pitch of the terrain.

• Industrial and Heavy Industrial pickets are 1" square x 0.062" thick

Horizontal Rails: Rails are specially designed C-Channels with ribbed reinforced side walls. Square holes are punched in the top of the rails to allow the pickets to pass through. Because aluminum extrusions allow metal to be placed where it is needed most, the reinforced side walls and top has been designed for additional strength. The number of rails used in a section varies with the height and strength of the fence.

- Industrial Rails are 1-5/8" x 1-5/8" with a side wall thickness of 0.100" and 0.070" thick top wall
- Heavy Industrial Rails are 1-5/8" x 1-5/8" with a side wall thickness of 0.100", top wall thickness 0.070" and bottom wall thickness of 0.062", which snaps into the top allowing all screws to be enclosed inside the rail.

Posts: Posts are hollow square extrusions with holes pre-punched to allow the rails from the fence sections to slide into them. This keeps the fence sections secure in place. Posts can be placed no more than 8' apart.

- Industrial Posts are 2-1/2" square x 0.100" thick or 3" square x 0.125" thick or 4" square x 0.125" thick
- Heavy Industrial Posts are 3" square x 0.125" or 4" square x 0.125" thick

Gates: Matching gates are available for all styles. Industrial and Heavy Industrial gates are fabricated with 2" or 2-1/2" square ends, 1-5/8" x 1-5/8" rails and 1" square pickets. The hinges are made from aluminum extrusions with a 3/8" stainless steel pin that may be attached to either a post or a wall. Self-closing springs and self-latching latches are available for all gates. A proprietary Ultra-Hinge, with its U.H.M.W. insert, is available for gates that swing. For sliding gates an enclosed track cantilever system is offered with "sealed for life" bearings on the truck assemblies. Our gates offer one of the highest strength to weight ratios in the fence industry.

NOTE: A 4' gate fits a 4' opening, inside-to-inside of the posts.

Finish: TGIC-Polyester Powder Coated. The coating is applied by electrostatic spraying and is cured at 400°F for 10 minutes. The finish conforms to and passes the following standards and tests:

- Salt spray resistance test ASTM B-117
- Humidity resistance test ASTM D-2247 no blistering at 3000 hours

- A. ASTM A 276 Standard Specification for Stainless Steel Bars and Shapes.
- B. ASTM B 221 Specification for Aluminum Alloy Extruded Bars, Rods, Wire Shapes and Tubes.
- C. AAMA 2604 Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels

5. INSTALLATION

The Ultra Aluminum Picket Fence comes fully assembled in 6' to 8' sections. Sections are normally installed 2" - 3" from the ground to allow trimming the grass under the fence. Pre-punched posts are used every 6' to 8' to connect the sections. The posts are set approximately 24" to 42" in concrete footings or are mounted using welded flange plates. The fence is installed by setting a post in concrete and inserting a section into the pre-punched holes in the post. A second post is then set at the other end of this section. A second section inserts into the second post, and so on. The fence will rake 6" over 6' to follow the contour of the ground, without any special preparation. If a greater slope is involved, the fence can be specifically made to accommodate more severe grades.

6. AVAILABILITY AND COST

Ultra Aluminum Picket Fence is available through any fence dealer nationwide. A complete package of information including price list and specifications is available by contacting an Ultra dealer or the Ultra office.

6.1 SUBMITTALS

Submit under provisions of Section 01300.

[Product Data]: Manufacturer's data sheets on each product to be used, including:

- 1. Preparation instructions and recommendations.
- 2. Storage and handling requirements and recommendations.
- Installation methods.

Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, gates, and schedule of components.

** NOTE TO SPECIFIER ** Delete selection samples if colors have already been selected.

Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

6.2 QUALITY ASSURANCE

Manufacturer Qualifications: Company specializing in manufacturing Products specified in this section with minimum five years documented experience.

6.3 DELIVERY, STORAGE, AND HANDLING

Transport, handle, store, and protect products so that they are in undamaged condition when installed.

Store products in manufacturer's unopened packaging to protect prefinished aluminum surfaces until ready for installation.

Store components off the ground in a dry covered area, protected from adverse weather conditions.

7. WARRANTY

Ultra guarantees the Aluminum Picket Fence for life. This guarantee covers defects in workmanship and materials, as well as the TGIC polyester powder-coat finish. The paint will not peel, craze, or chip.

8. MAINTENANCE

No maintenance is required due to the excellent corrosion resistance of the painted aluminum.

9. TECHNICAL SERVICES

Experienced Ultra representatives are available for consultation on particular fencing requirements without obligation.

10. FILING SYSTEMS

<u>SPECIFICATIONS</u> <u>INDUSTRIAL</u>

Post 2-1/2" x 2-1/2" x .100 Wall

3" x 3" x .125 Wall 4" x 4" x .125 Wall

Horizontal Rail 1-5/8" x 1-5/8"

Enclosed Bottom N/A
Side Walls .100
Top Walls .070

Pickets 1" x 1" x .062 Wall

Picket Spacing 4" or 1-1/2"

Heights 3, 4, 5, 6, 7, 8 & 10 Feet

Colors - Black, Bronze, White, Beige & Green.

Screws - 18 -8 Stainless Steel corrosion resistant. The heads are painted to match the color of the fence.

Panels - Fully Assembled 6 feet in length plus or minus one inch.

<u>SPECIFICATIONS</u> <u>HEAVY INDUSTRIAL</u>

Post 3" x 3" x .125 Wall 4" x 4" x .125 Wall

1-5/8" x 1-5/8"

Enclosed Bottom Yes
Side Walls .100
Top Walls .070

Horizontal Rail

Pickets 1" x 1" x .062 Wall

Picket Spacing 4" or 1-1/2"

Heights 4, 5, 6, 7, 8, and 10 Feet

Colors - Black and Quaker Bronze

Screws - 18-8 Stainless Steel Corrosion Resistant.

Panels - Fully assembled 6 feet in length plus or minus one inch

MANUFACTURERS

Acceptable Manufacturer: **Ultra Aluminum Mfg., Inc.**, 2124 Grand Commerce Drive Howell, MI 48855

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Email: info@ultraaluminum.com. Web: www.ultrafence.com

D. Substitutions: Not permitted.

Requests for substitutions will be considered in accordance with provisions of Section 01600.