

SECTION 32 31 13
EXTRUDED POLYVINYLCHLORIDE (PVC) FENCING AND GATES

PART 1 - GENERAL

1.1 DESCRIPTION

This work consists of all labor, materials, and equipment necessary for furnishing and installing PVC fence, gates and accessories in conformance with the lines, grades, and details as shown.

1.2 RELATED WORK

Finish Grading: Section 31 20 00, EARTH MOVING, and Section 32 90 00, PLANTING.

1.3 MANUFACTURER'S QUALIFICATIONS

Fence, gates, and accessories shall be products of manufacturers' regularly engaged in manufacturing items of type specified.

1.4 SUBMITTALS

A. In accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES, furnish the following:

1. Manufacturer's Literature and Data: PVC fencing, gates and all accessories.
2. Shop Drawings: Layout of fence and gates with dimensions, details and finishes of component accessories and post foundations.
3. Samples: Color selections for PVC. If requested, samples of materials.

1.5 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. Federal Specifications (Fed. Spec.):
 FF-P-110J.....Padlock, Changeable Combination

1.04 WARRANTY

- A. Provide manufacturer's Lifetime Limited Warranty.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Products from other qualified manufacturers having a minimum of 5 years experience manufacturing PVC fencing will be acceptable by the Resident Engineer as equivalent if they meet the following specifications for

design, size, and fabrication. PVC Profiles, lineals and extrusions used as components must "meet or exceed" the minimum performance guidelines laid out in ASTM 964-02.

B. PVC FENCE:

Style: Solid Privacy with Flat Top.

Height: As Noted on PLANS.

2.02 PVC FENCE:

A. Pickets, rails, and posts fabricated from PVC extrusion. The PVC extrusions shall comply with ASTM D

1784, Class 14344B and have the following characteristics:

Specific Gravity (+/- 0.02)	1.4
Using 0.125 specimen Izod impact ft. lbs./in. notch	23.0
Tensile strength, PSI	6,910
Tensile modulus, PSI	336,000
Flexural yield strength, PSI	10,104
Flexural modulus, PSI	385,000
DTUL at 264 PSI	670C

B. Pickets: 7/8" x 6"

C. Top Rail: 2" x 3.5"

D. Bottom Rail: 1.5" x 5.5"

E. Posts: 5" square

F. Color: Tan

2.03 CONCRETE

ASTM C94/C94M, using 19 mm (3/4 inch) maximum-size aggregate, and having minimum compressive strength of 25 mPa (3000 psig) at 28 days. Non-shrinking grout shall consist of one part Portland cement to three parts clean, well-graded sand, non-shrinking grout additive and the minimum amount of water to produce a workable mix.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Ensure property lines and legal boundaries of work are clearly established.

3.02 INSTALLATION

- A. Follow individual installation instructions for the appropriate style) in setting posts. Set gate posts for gate opening specified in the construction drawings. Posts shall be placed 24" - 36" in the ground,

depending upon the style of fence and local conditions and set in concrete.

- B. Gate posts and corner posts on all fences and line posts on taller fences shall be filled with concrete for additional strength.
- C. Place assembled fence sections into position and slide rails into posts. The rails are secured into posts by tabs which are notched into the rails and catch on the inside wall of the post.
- D. Check each post for vertical and top alignment, and maintain in position during placement and finishing operation.

3.03 POST SETTING

Install posts plumb and in alignment. Set post in concrete footings of dimensions as shown. Thoroughly compact concrete so as it to be free of voids and finished in a slope or dome to divert water running down the post away from the footing.

3.04 GATE INSTALLATION

- A. Install gates plumb, level, and secure for full opening without interference using bolt-on hardware supplied by the manufacturer. Set keepers, stops and other accessories into concrete as required by the manufacturer and as shown. Adjust hardware for smooth operation and lubricate where necessary.
- B. Adjust hardware for smooth operation.

3.05 ACCESSORIES

- A. Install post caps and other accessories to complete fence.

3.05 FINAL CLEAN-UP

Remove all debris, rubbish and excess material from the site.

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