

ITEM 08607.90 M - WOOD SCREEN FENCE

DESCRIPTION:

This work consists of furnishing and erecting a wood screen fence to the height and at the locations shown on the plans or where directed by the Engineer.

MATERIALS:

Class A Concrete - All the material requirements of Section 555-2 and Section 556-2 shall apply.

Caulking Compound For Structures	705-06
Wood Preservative - Water Borne	708-31
Paint or Stain	708-01
Bar Reinforcement, Grade 420	709-01
Stress Graded Timber and Lumber	712-14
Structural Steel (A-36M)	715-01
Galvanized Coatings	719-01
Anchor Bolts	723-60
Painting Timber and Lumber	740-02
Painting Galvanized Surfaces	740-03

Additional requirements for the wood fence shall be as follows: timber and lumber delivered to the site shall be straight, sound, square edged, free from shakes, loose knots or decay. Sheathing shall be tongue and groove; shall be use classified as "Joist and Planks" and have a design value of 8273 KPa, or greater, after adjustment for wind loading and wet service conditions. Stringers and posts shall be use classified as "Beam and Stringer," and have a design value of 9652 KPa, or greater, after adjustment for size, wind loading, and wet service conditions. All stresses are extreme fiber bending stresses and use classifications are as defined in ASTM D245.

The lattice shall be the best quality as approved by the Engineer.

Wood used shall be pressure treated in accordance with Section 708-31 Wood Preservative Water Borne, except the minimum retention shall be 9.61 kilograms per cubic meter. Moisture content of all sheathing shall be reduced to a maximum of 15% before and after pressure treating. Timber posts shall be reduced to an exterior moisture content of 15% to the depth of the penetration of the preservative and an interior moisture content of 30% maximum.

Structural glued laminated timber may be used for the posts. If used, it shall provide allowable design values of 16,547 KPa in bending before allowance for wet service, wind, and size factors. Preservative treatment shall be in accordance with AWWA C-28. "Standard for Preservative Treatment of Structural Glued Laminate Members." General requirements shall be those given for treatment of individual laminates before gluing.

Steel shapes, plates, nuts and washers, bolts, and anchoring devices etc. shall be galvanized in accordance with Section 719-01, unless indicated otherwise on the plans. Nails shall be hot dipped galvanized.

The following are regarded to be the essential functions and characteristics of the wood screen fence:

ITEM 08607.90 M - WOOD SCREEN FENCE

1. Have strength sufficient to withstand a wind load of 1274 Pa with the appropriate safety factors customarily employed.
2. Have a design life of 20 years or more.

CONSTRUCTION DETAILS:

Holes for post footings shall be pre-drilled, true and plumb to the stated diameter and depth as shown on the plans and as directed by the Engineer. Precautions shall be taken to protect the holes from collapse. Holes shall contain no free standing water at the time of concrete placement.

Bar reinforcement and anchor bolts shall be set, and secured in place. The hole shall then be filled with Class A concrete in direct contact with the soil.

Boards shall be erected and nailed to each stringer as shown on the plans. Nails shall be driven in a staggered and diagonal pattern and the nail heads hammered flush.

A portion of the groove may be removed from replacement sheathing boards to facilitate replacement.

Welding shall conform to the provisions of the New York State Steel Construction Manual.

Any cuts made after preservative treatment shall be carefully trimmed and coated in accordance with AWWA Specification M-4 to the satisfaction of the Engineer.

The bottom of all fence boards set below finish grade, shall have this portion of the boards sealed by applying a heavy coat of coal-tar and then backfilled.

METHOD OF MEASUREMENT:

Wood screen fence shall be measured for payment by the number of meters of fence satisfactorily erected in accordance with the specification. The fence shall be measured along the top, center to center of end posts.

BASIS OF PAYMENT:

The unit price bid per meter for the wood screen fence shall include the cost of furnishing all labor, materials, tools and equipment necessary to satisfactorily complete the work and shall include all necessary clearing and grubbing, excavation and disposal, fill, concrete, bar reinforcement, anchoring, posts, hardware, fencing, repair of material damaged by the contractor's operations and all other necessary materials.