

# 6' CHAIN LINK FENCE

## DESCRIPTION

3401.1 General: Chain Link Fence shall be constructed to the lines established by the Engineer and at the locations shown on the Plans or described in the Special Provisions.

## MATERIALS

3402.1 All ferrous materials shall be new and galvanized, imperfectly galvanized material or material upon which serious abrasions of the galvanizing occur, shall not be used. Fence material and appurtenances shall conform to the requirements of Section 80, "**Fences**," of the Standard Specifications, except as specified in these Technical Specifications or the Special Provisions.

3402.2 Post and Brace Requirements: All posts and braces shall be Schedule 40 steel pipe and shall be galvanized. Post and braces shall conform to the following requirements.

<u>Location</u>	<u>Minimum Outside Diameter in inches</u>	<u>Minimum Weight Per Linear Foot in Pounds</u>
End & Corner Posts	2-7/8	5.79
Line Posts	2-3/8	3.65
Braces	1-5/8	2.27
Gate Posts	2-7/8	5.79

The length of all posts, exclusive of fitted top fixtures shall not be less than the depth of the concrete footings shown on the City Standard Drawing less six inches (6") plus the height of the mesh.

3402.3 Top Rails: Continuous top rails shall be installed in post tops designed to support a top rail. Top rails shall meet the same specifications of quality as line and terminal posts. Rails shall have an outside diameter of one and five-eighth inches (1-5/8"), schedule 40. The chain link fabric shall be tied to the top rail at intervals of twenty-four inches (24") with No. nine gage (9 gage) soft annealed galvanized steel or aluminum tie wire.

3402.4 Post tops, extension arms, stretcher bars, and other required fittings and hardware shall be steel or malleable iron or wrought iron and shall be galvanized.

3402.5 Bottom Tension Wire: The tension wire shall be at least seven gage (7 gage) galvanized coil spring steel.

3402.6 Fabric: Chain link fence fabric shall be No. nine gage (9 gage), shall be six feet (6') in height and shall be woven into approximately two inch (2") mesh.

Chain Link fabric with redwood slats shall be No. nine gage (9 gage), three and one-half inch by five inch mesh (3-1/2" x 5"). Redwood slats shall be locked in and shall be two and one-half inch by five-sixteenth inch by six feet (2-1/2" x 5/16" x 6').

The fabric shall be hot dip galvanized after weaving.

- 3402.7 Gates: Gates shall be of the design and to the dimensions shown on the plans or included in the specifications. Frames shall be constructed of pipe conforming to standard specifications for black and galvanized welded and seamless steel pipe for ordinary uses, ASTM Designation A-120, Schedule 40. Gate frames shall be joined at the corners by arc welding to form a rigid one-piece panel and filled with chain link fabric of the type shown on the plans. The fabric shall be fastened in the frame on all four sides by the use of stretcher bars and tie wires as specified for the fence construction. Gate frames shall be extended 1 foot at the top to accommodate 3 strands of barbed wire.
- 3402.8 Barbed wire: Barbed wire shall consist of two (2) strands of twelve and one-half gage wire (12-1/2 gage), twisted with two point fourteen gage (2.14 gage) barbs spaced not more than five inches (5") apart.
- 3402.9 Concrete: Concrete shall contain a minimum of five (5) sacks of Portland cement per cubic yard, Class B Concrete.
- 3402.10 Premolded Expansion Joint filler: Premolded joint filler shall conform to the specifications of ASTM Designation D 1751.

### **CONSTRUCTION PROCEDURE**

- 3403.1 Posts: Line posts shall be spaced at not more than ten foot (10') intervals, measured from center to center of posts. All posts shall be set in a concrete footing conforming to the details shown on the City Standard Drawing. Changes in line where the angle of deflection is thirty degrees (30°) or more shall be considered as corners and corner posts shall be installed.
- 3403.2 Braces: End, corner, and gate posts shall be braced to the nearest line post with galvanized diagonal or horizontal braces used as compression members and galvanized three-eighth inch (3/8") truss rods with turnbuckles used as tension members. Line posts shall be braced horizontally and trussed in both directions at intervals not to exceed one thousand feet (1,000').
- 3403.3 Fabric Fastening: The fabric shall be stretched and securely fastened to end, corner and gate posts with one-quarter inch (1/4") by three-quarters inch (3/4") stretcher bars and not less than one-eighth inch (1/8") by three-quarters inch (3/4") stretcher bar bands spaced at one foot intervals. The fasteners shall be spaced at approximately eighteen inches (18") on the top rails and tension wires. Tension wires shall be stretched tight.

- 3403.4      Extension Arms: Extension arms shall be provided for the line posts. The extension arm shall be malleable iron or pressed steel and shall extend at a forty-five degree (45°) angle and shall be slotted to carry three (3) evenly spaced strands of barbed wire.
- 3403.5      Concrete Mow strip: A concrete mow strip shall be constructed to the dimensions shown on the city Standard Drawing after the poles have been set and before fabric and accessories are installed.
- 3403.6      Fresh concrete shall be struck off and compacted until a layer of mortar has been brought to the surface. The surface shall be finished to grade and cross section with a float and troweled smooth.
- 3403.7      Joints one-quarter inch ( $\frac{1}{4}$ " ) wide shall be constructed at sixty foot (60') maximum intervals. Expansion joints shall be filled with premolded expansion joint filler shaped to the cross-section of the mow strip. The top edge of expansion joint filler shall be placed one-quarter inch ( $\frac{1}{4}$ " ) below all concrete surfaces.