

TECHNICAL SPECIFICATIONS
FOR
CHAIN LINK CANTILEVER SLIDE GATES

1. Description

This work will consist of furnishing and constructing chain link cantilever slide gates where shown on the construction drawings.

2. Materials

- (a) The height of the gate will be 5 feet.
- (b) The wire will be 60" wide with 2" mesh galvanized chain link fabric and 1.2 oz. coated. Install the fabric with hook bolts and tension bars at all 4 sides. Attach to gate frame at not more than 15 inches on center.
- (c) The gate frames will be fabricated in accordance with ASTM F 1184, Class 2, using 2 inch square aluminum members, ASTM B 221, alloy and temper 6063-T, weighing 0.94 lb/ft. Weld members together forming rigid one-piece frame integral with top track. Provide 2 truck assemblies for each gate leaf, except as indicated for gates larger than 30 feet. Gates over 27 feet in single opening shall be shipped in 2 parts and field spliced with special attachments provided by the manufacturer.
- (d) For gate leaf sizes 23 feet to 30 feet, weld an additional 2 inch square lateral support rail adjacent to top horizontal rail. Bottom rail shall consist of 2 inch x 4 inch aluminum member weighing 1.71 lb/ft. The cantilever support (overhang) shall be 12 feet for gate leaf sizes 23 feet to 30 feet.
- (e) The bracing shall consist of diagonal adjustable length truss rods, of 3/8 inch galvanized steel, in each panel of gate frames.
- (f) The top track/rail shall consist of an enclosed, combination one-piece track and rail, aluminum extrusion with weight of 3.72 lb/ft. Track to withstand reaction load of 2,000 lb.
- (g) The truck assembly will consist of a swivel type, zinc die cast, with 4 sealed lubricant ball bearing rollers, 2 inches in diameter by 9/16 inch in width, and 2 side rolling wheels to ensure truck alignment in track. Mount trucks on post brackets using 7/8 inch diameter ball bolts with 1/2 inch shank. Design truck assembly to withstand same reaction load as track.
- (h) The gate hangers, latches, brackets, guide assemblies, and stops shall consist of malleable iron or steel, galvanized after fabrication. Provide positive latch with provisions for padlocking.
- (i) The bottom guide wheel assemblies shall consist of two 4 inch diameter rubber wheels, straddling bottom horizontal gate rail, allowing adjustment to maintain gate frame plumb and in proper alignment. Attach one assembly to each guide post.
- (j) The gate posts shall consist of 4 inch O.D. schedule 40 galvanized steel pipe weighing 9.1 lb/ft. Provide 4 support posts for double slide gates.

(k) The gate posts will be set in Class A concrete as described in the City of Knoxville Technical Specifications, Section 15.0.

3. Equipment Construction Requirements

Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6 inches deeper than the post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36 inches below surface when in firm, undisturbed soil. Place Class A concrete around posts in a continuous pour, tamp for consolidation. Trowel finish around post and slope to direct water away from posts. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.

The gates shall be installed plumb, level and secure for full opening without interference.

All hardware shall be attached by means which will prevent unauthorized removal.

All hardware shall be adjusted for smooth operation.

Construction will be in accordance with the manufacturer's guidelines and the guidelines established by the Chain Link Fence Manufacturing Institute.

4. Method of Measurement

The chain link cantilever slide gates will be measured on a per each basis for each size as indicated on the Project Plans.

5. Payment

Chain link cantilever slide gates will be paid for on a per each basis for each size. Payment shall be full compensation for all work, materials, labor, and incidentals to complete the work in accordance with the Plans and Specifications.