

**SECTION 02820
BASEBALL BACKSTOP**

PART 1 GENERAL

1.01.1 SECTION INCLUDES

- A. **Permafused II™** Polyolefin coated baseball backstop.

1.02 GATES AND RELATED SECTIONS

- A. Section 03300 Cast-In-Place Concrete

1.03 SUBMITTALS

- A. Changes in specification may not be made after the bid date.
- B. Shop drawings: Layout of Baseball Backstop with dimensions, details, and finishes of components, accessories, and post foundations.
- C. Product data: Manufacturer's catalog cuts indicating material compliance and specified options.
- D. Samples: Color selections for Polyolefin finishes. If requested, samples of materials (e.g., fabric, wires, and accessories).

1.04 SPECIAL WARRANTY

- A. Provide Manufacturer's standard limited warranty that its Polyolefin Coated Baseball Backstop Chain Link Fence is free from color coating flaking and peeling and other defects in material or workmanship for a period of 15 years from the date of purchase. See Manufacturers Warranty for full details.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Products from qualified manufacturers having a minimum of five years experience manufacturing thermally fused chain link fencing will be acceptable by the architect as equal, approved in writing, ten days prior to bidding, and if they meet the following specifications for design, size gauge of metal parts and fabrication are met.
- B. Obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source

Approved Manufacturer: Master Halco, Inc.
4000 W. Metropolitan Drive, Suite 400
Orange, CA 92868
Phone (800) 229-5615 Fax (714) 385-0107
Site: www.fenceonline.com E-mail: spec@fenceonline.com

2.02 CHAIN LINK FENCE FABRIC (see index for selections)

- A. **Permafused II™** Polyolefin elastomer coating, 6 mil (0.15 mm) to 10 mil (0.25mm) thickness, thermally fused to zinc-coated steel core wire: Per ASTM F 668 Class 2b. Minimum core wire tensile strength of 75,000 psi (517 MPa).
- B. Size: Helically wound and woven to height of 18 feet as indicated on drawings.

Roof fabric: 2" (50 mm) diamond mesh of 9 gauge core wire with a diameter of 0.148" (3.76 mm) and a break load of 1290 lbs (5740 N). Color Forest Green ASTM F 934.

Side Fabric: Woven to height of 18 feet [as indicated on drawings with 2" (50 mm) diamond mesh of 6 gauge core wire with a diameter of 0.192" (4.88 mm) and a break load of 2170 lbs (9650 N). Color Forest Green ASTM F 934.

- C. Selvage of fabric knuckled at top and knuckled at bottom.

2.03 STEEL FENCE FRAMING

- A. Steel pipe - Type I: ASTM F 1083, standard weight schedule 40; minimum yield strength of 30,000 psi (205 MPa); sizes as indicated. Hot-dipped galvanized with minimum average 1.8 oz/ft² (550 g/m²) of coated surface area.
- B. Polyolefin Coated finish: In accordance with ASTM F1043, apply supplemental color coating of minimum 10 mils (0.254mm) of thermally fused Polyolefin in Forest Green color.
- C. End and Corner Post: 4" od (101.6 mm) 9.11 lbs per/ft (13.6 kg/m)
Line (intermediate) Post: 4" od (101.6 mm) 9.11 lbs per/ft (13.6 kg/m)
- D. Horizontal rails and roof members 1.9" od (48 mm) 2.72 lbs per/ft (3.65 kg/m)

2.04 POLYOLEFIN COATED ACCESSORIES

- A. Chain link fence accessories: ASTM F 626, Provide items required to complete fence system. Galvanize each ferrous metal item in accordance with ASTM A 153 and finished to match framing. Fittings should match Master Halco specifications.
- B. Post caps: Formed steel or cast malleable iron weather tight closure cap for tubular posts. Provide one cap for each post, except where barbed wire supporting arms are indicated. "C" shaped line post without top rail or barbed wire supporting arms do not require post caps. (Where top rail is used, provide tops to permit passage of top rail.)
- C. Top rail and rail ends: Pressed steel per ASTM F626, for connection of rail and brace to posts.
- D. Top rail sleeves: (7" (178 mm) expansion sleeve with minimum .137" wire diameter and 1.80" length spring, allowing for expansion and contraction of top rail.
- E. Wire ties and clips: 9 gauge [0.148" (3.76 mm)] galvanized steel wire for attachment of fabric to line posts. Double wrap 13 gauge [0.092" (2.324 mm)] for rails and braces. Hog ring ties of 12-1/2 gauge [0.0985" (2.502 mm)] for attachment of fabric to tension wire.
- F. Brace and tension (stretcher bar) bands: Pressed steel, minimum 300 degree profile curvature for secure fence post attachment. At square post provide tension bar clips.
- G. Tension (stretcher) bars: One piece lengths equal to 2" (50 mm) less than full height of fabric with a minimum cross-section of 3/16" x 3/4" (4.76 mm x 19 mm). Provide tension (stretcher) bars where chain link fabric meets terminal posts.
- H. Tension wire: Thermally fused polyolefin applied to zinc coated steel wire: Per ASTM F 1664 Class 2 b, 6 gauge, [0.192" (4.88 mm)] diameter core wire with tensile strength of 75,000 psi (517 MPa).
- I. Truss rods & tightener: Steel rods with minimum diameter of 5/16" (7.9 mm). Capable of withstanding a tension of minimum 2,000 lbs.

- J. Nuts and bolts are galvanized but not polyolefin coated. Cans of touch up paint are available to color coat nuts and bolts if desired

2.05 SETTING MATERIALS

- A. Concrete: Minimum 28 day compressive strength of 3,000 psi (20 Map)

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 CHAIN LINK FENCE FRAMING INSTALLATION

- A. Install chain link fence in accordance with ASTM F 567 and manufacturers instructions.
- B. Concrete set all posts: Drill holes in firm, undisturbed or compacted soil. Holes should have a diameter 4 times greater than the outside of post, and depths approximately 6" (150 mm) deeper than 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" (900 mm) below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts.
- C. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
- D. Rail: Install single lengths between posts.

3.03 CHAIN LINK FABRIC INSTALLATION

- A. Fabric: Install fabric on field side, and attach so that fabric remains in tension after pulling force is released. Leave approximately 1" (25 mm) between finish grade and bottom selvage. Attach fabric with wire ties or clips to line posts at 15" (380 mm) on center and to rails, braces, and tension wire at 24" (600 mm) on center.
- B. Tension (stretcher) bars: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands spaced maximum of 15" (380 mm) on center.

.04 ACCESSORIES

- A. Tie wires: Bend ends of wire to minimize hazard to persons and clothing.
- B. Fasteners: Install nuts on side of fence opposite fabric side for added security.

3.05 CLEANING

- A. Clean up debris and unused material, and remove from the site.

END OF SECTION 02820