

**SUGGESTED MASTER SPECIFICATION
SECTION 03 15 00 BAR-LIFT PLASTIC CHAIRS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Bar-lift apparatus which is capable of holding its position by clamping into the reinforcing steel without falling or moving
- B. Bar-lift apparatus is capable of providing a constant clear cover of the reinforcement steel in the concrete with insignificant voids as long as proper techniques are used in placing concrete
- C. Bar-lift chairs information below is based on test of ability of the chair to withstand axial load; and the ability of the chair to allow concrete to fill inside of it without any void sand/or honeycombing

1.02 REFERENCES

- A. Comply with all provisions of the following codes, specifications, and standards except where more stringent requirement are shown or specified
 - 1. ACI 318, "Specifications for Structural Concrete for Buildings."
 - 2. ACI 301, "Specifications for Structural Concrete for Buildings."
 - 3. ACI 117, "Specification for Tolerance for Concrete Construction and Material."
 - 4. ACI 315, "Specifications for Detailing and Standard Practice."
 - 5. ACI SP (66) , Detailing Manual 2004
 - 6. CRSI (DA4), "Manual of Standard Practice; Concrete Reinforcing Steel Institute 2009"
 - 7. CRSI (P1), "Placing Reinforcement Bars; Concrete Reinforcing Steel Institute; 2011"
 - 8. ASTM C 143- Standard Test Method for slump of Hydraulic cement concrete
 - 9. WIRE REINFORCEMENT INSTITUTE – TF-702-R-08
 - 10. ASTM C 143 – Standard Test Method for Slump of Hydraulic Cement Concrete
 - 11. GEOCON – PROJECT NO. A8426-06-01
 - 12. TERRACON – DCE PROJECT NO. 204M2039 report no. 004
 - 13. TEXAS DEPARTMENT OF TRANSPORTATION – Product Evaluation 12-2756 "Bar-Lift Rebar Chair"
 - 14. CITY OF LOS ANGELES CALIFORNIA – RR 25627

1.03 QUALITY ASSURANCE

- A. Quality Control: The Contractor is responsible for the quality control, including workmanship and materials furnished by suppliers
- B. Perform work in accordance to ACI 301 and ACI 318
- C. Due to its geometry, the Bar Lift apparatus is more capable of supporting torsion and lateral forces

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Store chair supports in an area protected from dirt, oil and sunlight
- B. Apparatus delivered to job site be in a purple nylon bag labeled with Bar lift Inc. and product specifications

PART 2 PRODUCTS

2.01 MATERIAL

- A. Polyethylene plastic chair support manufactured by Bar-Lift Incorporated shall be sized for adequate support of reinforcement during concrete placement, profile style number
- B. Provide superior strength, support loads up to 500lbs
- C. Eliminates corrosion on exposed surfaces
- D. Apparatus to be used to support reinforcement for concrete placement for commercial and residential foundations
- E. Fits reinforcement bars of #3, 4, 5, 6
- F. Fits wire mesh of 4, 6, 8 & 10 Gauge
 - a. Part 001 - 2 ½" x 2 ½" x 3 ½" Elevation – To be delivered in a purple nylon bag
 - b. Part 002 - 2 ½" x 2 ½" x 3 ½" Elevation – To be delivered in a purple nylon bag
 - c. Part 003 – 1 ½" x 1 ½' x 2 ½' Elevation – To be delivered in a orange nylon bag
 - d. Part 004 – 2 ½" x 2 ½" x 4" Elevation – To be delivered in a purple nylon bag

PART 3 EXECUTIONS

3.01 INSTALLATION

- A. Install reinforcement support in accordance to ACI standards
- B. Place and support reinforcement supports and secure reinforcement against displacement. Do not deviate position
- C. Only laborers who are experienced with steel reinforcement placement, should install rebar support chairs. Maximum spacing should not exceed 48 inches. Comply with applicable codes and design criteria for minimum spacing of reinforcement from edges of forms.
 - a. Provide chairs required to maintain reinforcing steel at proper elevation in slab
 - b. Exercise particular care to maintain proper distance and clearance between parallel bars and between bars and forms

3.02 FIELD QUALITY CONTROL

- A. Bar-lift Chair Support are to be installed as per compliance and approval of structural engineer of record, but not limited to the following
 - a. Uneven soil conditions
 - b. Incorrect spacing of materials
 - c. Misalignment of chairs on slab
 - d. Visible signs of uneven placement of chairs

END OF SECTION