

SECTION 32 17 13 - PARKING BUMPERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Precast concrete parking bumpers and anchorage.

1.02 REFERENCE STANDARDS

- A. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.
- B. ASTM C150/C150M - Standard Specification for Portland Cement; 2015.
- C. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete; 2010a.
- D. ASTM C330/C330M - Standard Specification for Lightweight Aggregates for Structural Concrete; 2014.

1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide unit configuration, dimensions.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Parking Bumpers: Precast concrete, conforming to the following:
 - 1. Nominal Size: 6 1/2 inches high, 9 inches wide, 8 feet long.
 - 2. Profile: Rectangular cross section with sloped vertical faces, square ends.
 - 3. Cement: ASTM C150/C150M, Portland Type I - Normal; white color.
 - 4. Concrete Materials: ASTM C330/C330M aggregate, water, and sand.
 - 5. Reinforcing Steel: ASTM A615/A615M, deformed steel bars; unfinished, strength and size commensurate with precast unit design.
 - 6. Air Entrainment Admixture: ASTM C260/C260M.
 - 7. Concrete Mix: Minimum 5,000 psi compressive strength after 28 days, air entrained to 5 to 7 percent.
 - 8. Use rigid molds, constructed to maintain precast units uniform in shape, size and finish. Maintain consistent quality during manufacture.
 - 9. Embed reinforcing steel, and drill or sleeve for two dowels.
 - 10. Cure units to develop concrete quality, and to minimize appearance blemishes such as non-uniformity, staining, or surface cracking.
 - 11. Minor patching in plant is acceptable, providing appearance of units is not impaired.
- B. Dowels: Steel, unfinished; 5/8 inch diameter, 24 inch long, pointed tip.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install units without damage to shape or finish. Replace or repair damaged units.
- B. Install units in alignment with adjacent work.
- C. Fasten units in place with 2 dowels per unit.

END OF SECTION