POLE BASE™ PRECAST CONCRETE LIGHT POLE BASE UNITS

Pole Base™ units are machine-placed, wet-cast, precast light pole bases. The bases are manufactured from air-entrained, structural grade concrete mixes in accordance with ASTM C94 or ASTM C685 that produce a finished product with excellent resistance to deterioration from freeze-thaw cycles and deicing chemical exposure. The bases are available in multiple diameters and textures, providing superior aesthetics over traditional site cast alternatives. All Pole Base™ units are manufactured and distributed through an international network of individually owned licensed precast concrete manufacturers. The controlled, factory conditions in which the bases are manufactured produce consistent, high quality products with tight dimensional tolerances on the concrete unit, reinforcing steel, anchor rods, and electrical conduits. A full listing of Pole Base™ units, detailed construction installation recommendations, design recommendations, application details, and customization options are available at www.polebase.com.

TEXTURE OPTIONS

ROUND SMOOTH	SQUARE
ROUND RUSTICATED	BRICK LEDGE
LEDGESTONE	

CONCRETE MIX PROPERTIES [1]

PORTLAND CEMENT [2]	MINIMUM 28 DAY COMPRESSIVE STRENGTH [3]	MAXIMUM WATER CEMENT RATIO	NOMINAL MAXIMUM AGGREGATE SIZE	AGGREGATE CLASS DESIGNATION [6]	AIR CONTENT [7]
TYPE I OR III	5,000 psi (34.5 MPa)	0.40	1 inch (25 mm)	4S	6.0% ± 1.5%
MAXIMUM WATER-SOLUBLE CHLORIDE ION (Cl^-) CONTENT IN CONCRETE, PERCENT BY WEIGHT OF CEMENT [8]					0.15
MAXIMUM CHLORIDE AS Cl^- CONCENTRATION IN MIXING WATER, PARTS PER MILLION					1000
MAXIMUM PERCENTAGE OF TOTAL CEMENTITIOUS MATERIALS BY WEIGHT [9] (VERY SEVERE EXPOSURE CLASS ONLY)					
FLY ASH OR OTHER POZZOLANS CONFORMING TO ASTM C618					25
SLAG CONFORMING TO ASTM C989					50
SILICA FUME CONFORMING TO ASTM C1240					10
TOTAL OF FLY ASH OR OTHER POZZOLANS, SLAG, AND SILICA FUME [10]					50
TOTAL OF FLY ASH OR OTHER POZZOLANS AND SILICA FUME [10]					35
ALKALI-AGGREGATE REACTIVITY MITIGATION PER ACI 201					

[1] Concrete mix properties are in general accordance with ACI 318 durability requirements. Research has shown that concrete manufactured to these standards demonstates good durability and performance. When these requirements are followed, specific freeze thaw testing of the concrete is typically NOT required.
[2] Defined in ASTM C150.
[3] Test method ASTM C39.
[6] Defined in ASTM C33 Table 3 *Limits for Deleterious Substances and Physical Property Requirements of Coarse Aggregate for Concrete*.
[7] Test method ASTM C231.
[8] Test method ASTM C1218 at age between 28 and 42 days.
[9] The total cementitious material also includes ASTM C150, C595, C845, and C1157 cement. The maximum percentages shall include:
(a) Fly ash or other pozzolans in type IP, blended cement, ASTM C595, or ASTM C1157.
(b) Slag used in the manufacture of an IS blended cement, ASTM C595, or ASTM C1157.
(c) Silica fume, ASTM C1240, present in a blended cement.
[10] Fly ash or other pozzolans and silica fume shall constitute no more than 25 and 10 percent, respectively, of the total weight of the cementitious materials.

OTHER MATERIALS

MINIMUM STEEL REINFORCING BARS - ASTM A615 OR ASTM A706 (LOW ALLOY "WELDABLE"), GRADE 60	
VERTICAL BARS	(4) #5 (16 mm) BARS, 1.5" (38 mm) MINIMUM COVER (OR PER PROJECT SPECIFICATIONS)
HORIZONTAL ROUND TIES	#3 (10 mm) BARS, TOP (3) SPACED AT 6" (150 mm), BALANCE SPACED AT 12" (300 mm) TO BOTTOM OF BASE
ANCHOR RODS	
STANDARD OPTION	SPECIFIED RODS, INSTALLED TO SPECIFIED PATTERN AND PROJECTION
PVC ELECTRICAL CONDUIT	
CUSTOM OPTION	CONDUIT NUMBER, DIAMETER, CONFIGURATION, AND MATERIAL INSTALLED PER PROJECT SPECIFICATIONS
STANDARD OPTION	(4) 1" (25 mm) DIA. CONDUITS WITH 90° BENDS, ASTM F512, INSTALLED AT CARDINAL POINTS, AND COUPLERS,
	ASTM F512, AT ALL CONDUIT EXIT POINTS ON TOP AND SIDES OF BASE. CONDUITS TERMINATE AT THE
	SIDES OF THE BASE 24" (610 mm) BELOW THE FINISHED TEXTURE PORTION OF THE UNIT.
JUNCTION BOXES	
CUSTOM OPTION	CARLON CURVED LID J-BOX NO. E88C24 OR NO. E1212C24 AVAILABLE FOR 24-IN (300mm) ROUND BASES
	OTHER CUSTOM INSERTS AVAILABLE. CONTACT YOUR LOCAL MANUFACTURER.