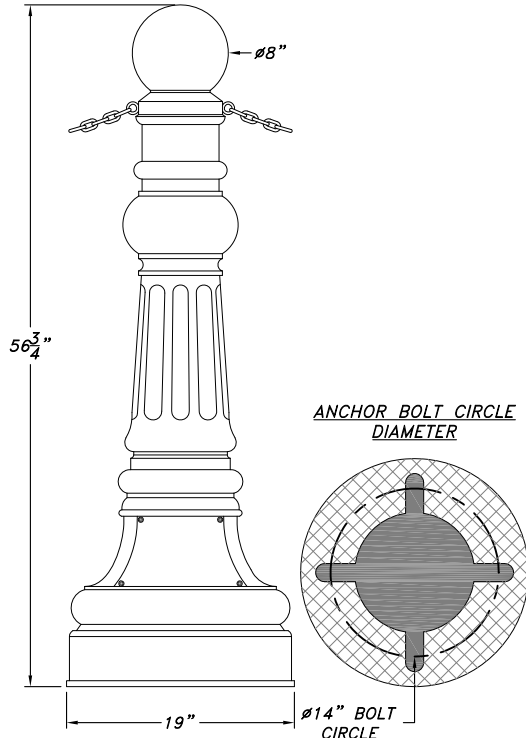
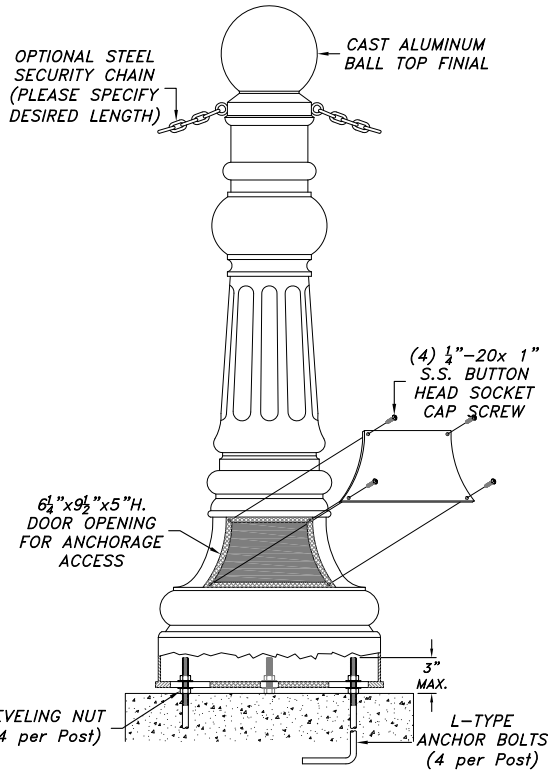


HARBOR SERIES



SCALE: 3/4" = 1'-0"



Catalog Name:

HB-19-BOLLARD-BT

Revision #: 0

Date: 02.15.18

Page: 1 of 1

Revision History: N/A

Niland Approval: Luis M. Gomez

Customer Approval:

CSI POLE SPECIFICATION

I. BOLLARD

Bollard shall be cast aluminum. Aluminum shall be certified as pure 356 copper free of any porosity, foreign materials or cosmetic fillers. Base casting shall be of uniform wall thickness with no warping or mold shifting. Minimum wall thickness shall be .250". Cast aluminum access cover shall be secured with two to four stainless steel screws. There are no exterior welds to finish. The anchor bolt locations in the base shall be cast in place as part of the base casting, for maximum strength.

II. ANCHORAGE DETAIL

Bollards shall use 1/2" x 18" L-type anchor bolts.

FINISHES

Five Year Powder Coating Warranty

Niland Company factory-applied powder coatings are warranted against peeling, excessive fading and cracking under normal climatic exposure for a period of five years from date of shipment. Damage to finish coating caused by abuse or mishandling during installation is not covered by warranty. This warranty is limited to the repair or replacement of the material involved and does not include reimbursement of consequential expenses such as installation or removal of equipment or transportation costs.

I. STANDARD FINISH

Satin iron achieved by rotary sanding, blasting and phosphate conversion coating.

II. THERMOSET POWDER PAINT FINISH

Pretreatment shall consist of degreasing phosphate acid-etching with 140° and de-ionizing water, rinsed and oven dried.

FINISH COAT

Thermoset TGIC super polyester powder coat finish electrostatically applied, oven cured and bonded at approximately 420° F to a minimum dry film thickness of 1.6 mils. All Niland powders must pass a minimum 3000-hour salt-spray test for corrosion resistance. The National Association of Architectural Metal Manufacturers, Metal Finishes Manual rates the outdoor life of these powders at 15-plus years.

III. LIQUID FINISH

Optional liquid finish is first prime coated then finished with a two part liquid epoxy coat.

WARRANTY

Niland Company warrants to repair or replace, at our option, any equipment that fails due to defects in material or workmanship within one year from date of shipment. This warranty does not include failures as a result of improper installation, mishandling or misapplication. This guarantee is limited to repair or replacement only and does not include reimbursement for expense of installation, removal of equipment, transportation or any other expenses that may be incurred. Authorization must be obtained from Niland Company in El Paso, Texas before any material is returned.

SECURITY CHAIN

- CHAIN LENGTH _____ ft
- NO CHAIN

COLOR OF POWDER COAT FINISH

- (BLK) BLACK (HG) HAND BRUSHED GREEN
- (BRZ) BRONZE (HR) HAND BRUSHED GRAY
- (GRN) GREEN CUSTOM _____



Niland Company