

3/19/2021

## Stop™ Surface Mount Bollard

**HANDLE WITH CARE!** Pangard II® Polyester Powder coat is a strong, long-lasting finish. Protect this finish from damage during installation. Place unwrapped powder coated parts on packaging foam or other non-abrasive surface. Do not place or slide powder coated parts on concrete or other hard or abrasive surfaces – this will damage the finish causing rust to occur. Use touch-up paint to repair any finish abrasions.

**NOTE:** Landscape Forms is not responsible for site preparation, footings, or electrical wiring.

### Procedure for installing surface mount bollard with no light:

#### Hardware:

Bollards include the following components (see Figure 1):

- (1) – Surface Mount Tube Assembly
- (1) – Bollard Casting
- (4) – 5/16-18 X 1.25 Set Screws with Thread Adhesive

#### Necessary Tools:

- Hammer Drill with masonry bits
- 3/16" Hex Wrench
- Socket wrench for anchoring hardware
- Hammer
- Blanket or other padded material

Anchoring hardware and installation are the responsibility of the installer. The surface mount bollard has a 3/8" thick mounting plate that can accept 3 anchors up to 3/8" thread size. If stud anchors are used, select an anchor length that allows the stud to extend 3/4" above the mounting surface.

**Warning:** *Layout of bollard tube assembly determines the layout of the bollard casting*

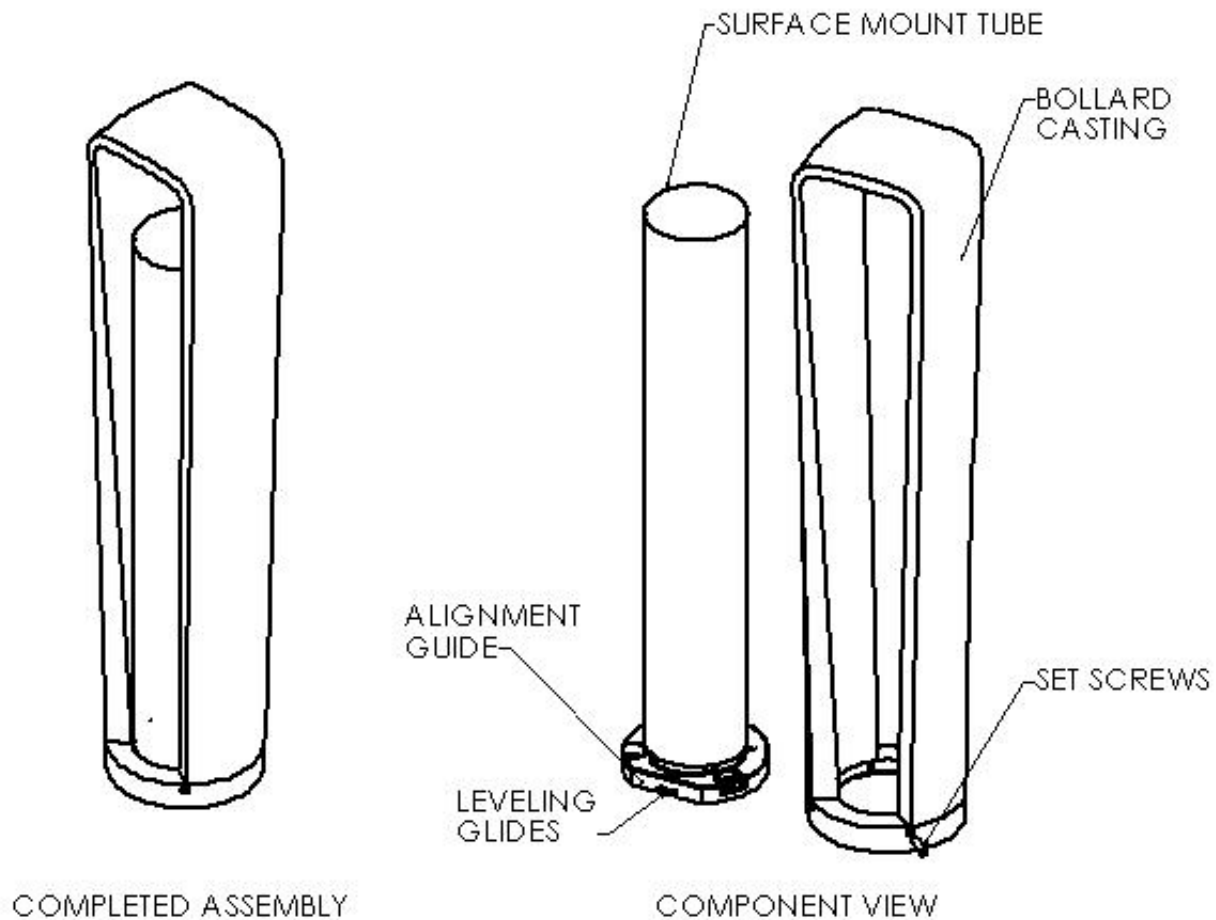
NOTE: ALL stop bollards have an alignment guide built into the assembly. The alignment guide consists of a flat edge on one of the components that is 2-11/16" from the center of the bollard tube. This flat edge aligns with the Front of the bollard. This alignment guide is the same for the Surface Mount, Embedded, and Removable Mount STOP bollards (See Figure 2), allowing them to be aligned during installation.

1. Place bollard(s) in the desired location and orientation(s) and mark hole locations. The surface mount plate has oblong holes to allow some minor variation when drilling into concrete. The installer should mark the center of these holes for the proper drill location.
2. Move bollard to allow access for drilling holes.
3. Install the bollard Surface Mount Tube and anchors according to the anchor manufacturer's instructions. We recommend stainless steel anchor hardware. Do not fully tighten anchors at this time.
4. The surface mount bollard also includes three leveling glides that can be accessed through the top of the surface mount plate. Using a 3/16" hex wrench, adjust the glides as necessary to plumb the surface mount tube.
5. Fully tighten anchoring hardware, following the manufacturers' recommendations, making sure the head of the anchoring bolt or nut is below surface mount plate top face (See Figure 3)
6. Gently place the bollard casting over the surface mount tube and lower it to the surface mount plate, using care not to scratch the finish of either component. The open side of the bollard casting is considered the front and should align with the flat edge of the surface mount plate.

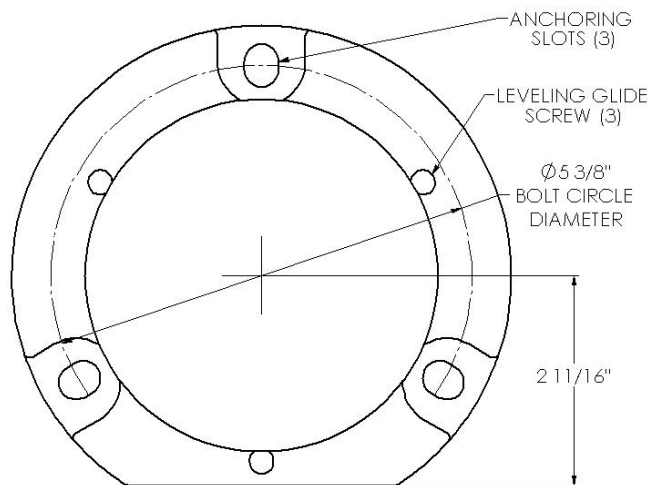
NOTE: The set screws have a tamper-resistant thread patch pre-applied to them. Once the set screws are installed, the adhesive begins to cure. The next few steps should be completed within 30 min.

7. Install the (4) set screws into the bollard casting until they just contact the surface mount plate.

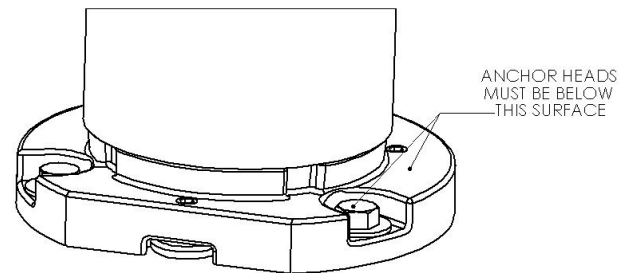
8. Verify the surface mount tube is centered within the bollard casting. Adjust as necessary and fully tighten the set screws.
9. Verify alignment of the bollard casting openings with architects drawing(s). If changes are necessary the set screws may be loosened, and the bollard casting may be rotated to the correct alignment. Repeat steps 7 and 8 if this is necessary



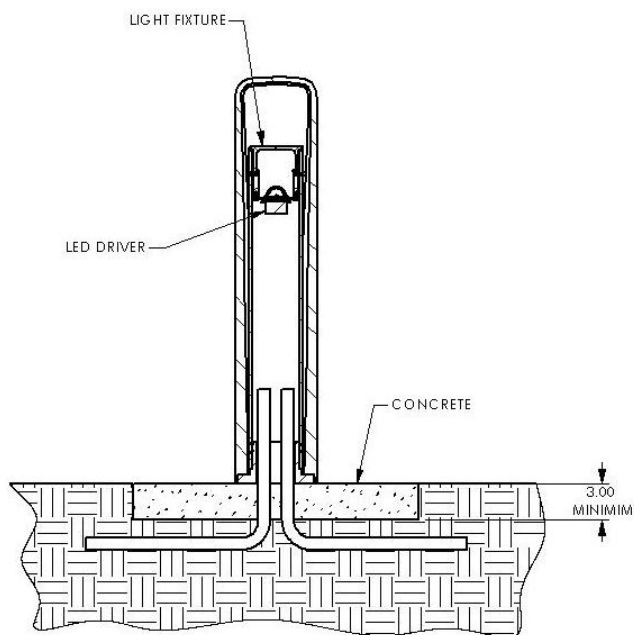
**Figure 1:** Surface Mount Bollard Components



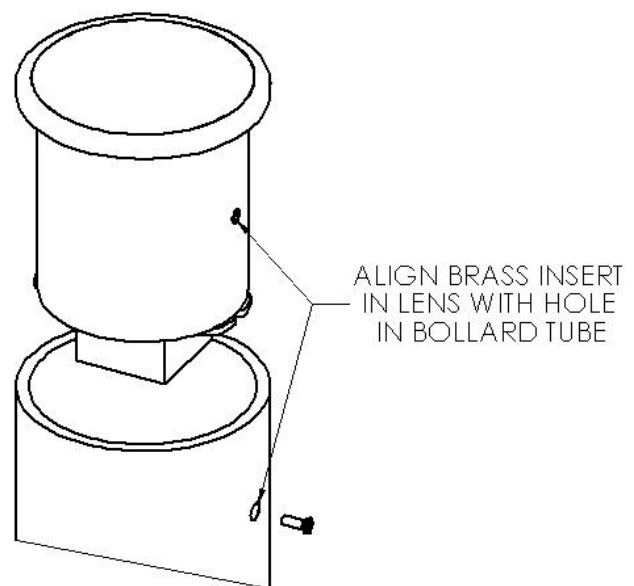
**Figure 2:** Surface Mount Plate Details



**Figure 3:** Anchoring Details



**Figure 4:** Bollard with Light Installation Details



**Figure 5:** LED Lens Assembly Installation

## Procedure for installing surface mount bollard with LED light:

### Hardware:

Bollards include the following components (see Figure 1):

- (1) – Surface Mount Tube Assembly
- (1) – Bollard Casting
- (4) – 5/16-18 X 1.25 Set Screws with Thread Adhesive
- (2) – 8-32 x ½ Flat Head Machine Screw
- (1) – LED Light / Lens Assembly

### Necessary Tools:

- Hammer Drill with masonry bits
- 3/16" Hex Wrench
- Socket wrench for anchoring hardware
- Hammer
- #2 Phillips screwdriver
- Blanket or other padded material

Anchoring hardware, wiring, and installation are the responsibility of the installer. The surface mount bollard has a 3/8" thick mounting plate that can accept 3 anchors up to 3/8" thread size. If stud anchors are used, select an anchor length that allows the stud to extend 3/4" above the mounting surface.

**CAUTION!** Fixtures and wiring must be installed in accordance with local codes and ordinances. Bollard light fixtures are intended to be connected to line voltage. Do not install lighted bollards within 10 feet of a pool, spa, fountain, or other water features.

**CAUTION!** Wiring is the responsibility of the installer. Conduit stub should be installed as close to the center of the desired bollard location as possible. If multiple conduit stubs are necessary, they must be arranged so they will fit inside the 3" diameter center opening of the bollard surface mount plate. (See Figure 4) Line voltage supply wires must be long enough to reach the top of the bollard (~ 38")

**WARNING!** LED cartridge and driver are not rated for connection or disconnection while energized. Doing so may damage LEDs and will void the warranty. Disconnect incoming power before making or breaking any electrical connections.

1. Place bollard(s) in the desired location and orientation(s) and mark hole locations. The surface mount plate has oblong holes to allow some minor variation when drilling into concrete. The installer should mark the center of these holes for the proper drill location.
2. Move bollard to allow access for drilling holes.
3. Place bollard over conduit stubs and pull excess wire through the top of the bollard tube.
4. Install the bollard Surface Mount Tube with anchors according to the anchor manufacturer's instructions. We recommend stainless steel anchor hardware. Do not fully tighten anchors at this time.
5. The surface mount bollard also includes three leveling glides that can be accessed through the top of the surface mount plate. Using a 3/16" hex wrench, adjust the glides as necessary to plumb the surface mount tube.
6. Fully tighten anchoring hardware, following the manufacturers' recommendations, making sure the head of the anchoring bolt or nut is below surface mount plate top face (See Figure 3)
7. **WITH POWER OFF**, connect supply wires to LED driver lead wires according to Local and National Electrical Code requirements.
8. Insert the lens and LED assembly into the top of the bollard tube and align the brass thread inserts in the side of lens with the two small holes near the top of the bollard tube (See Figure 5).
9. Insert the two 8-32 flat head screws into the threaded inserts through the holes in the bollard tube and gently tighten (See Figure 5).
10. Make sure the decorative ring on the top of the bollard lens is in alignment with the bollard tube. Fully tighten the two 8-32 screws.

11. Gently place the bollard casting over the surface mount tube and lower it to the surface mount plate, using care not to scratch the finish of either component. The open side of the bollard casting is considered the front and should align with the flat edge of the surface mount plate.

NOTE: The set screws have a tamper-resistant thread patch pre-applied to them. Once the set screws are installed, the adhesive begins to cure. The next few steps should be completed within 30 min.

12. Install the (4) set screws into the bollard casting until they just contact the surface mount plate.
13. Verify the surface mount tube is centered within the bollard casting. Adjust as necessary and fully tighten the set screws.
14. Verify alignment of the bollard casting openings with architects drawing(s). If changes are necessary the set screws may be loosened, and the bollard casting may be rotated to the correct alignment. Repeat steps 7 and 8 if this is necessary