

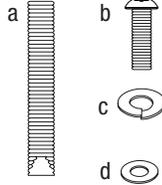
# TANGENT™ BOLLARD

## SURFACE MOUNT INSTALLATION INSTRUCTIONS

### MOUNTING KIT (SOLD SEPARATELY)

3/16" hex bit  
for tamper-resistant bolts

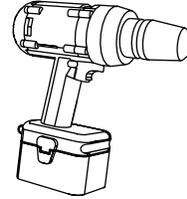
epoxy



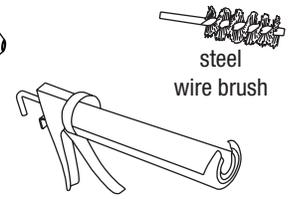
### TOOLS NEEDED

pencil

1/4", 1/2" & 3/4" drill  
bits for concrete

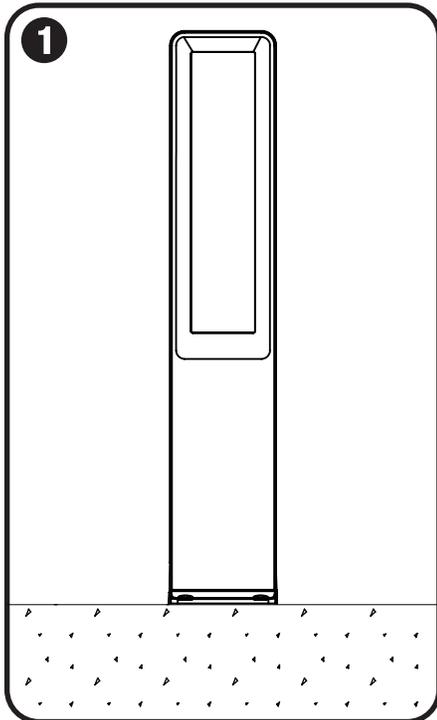


hammer drill



epoxy gun

### STEP BY STEP FOR ALL TANGENT BOLLARDS



#### Mark hole locations

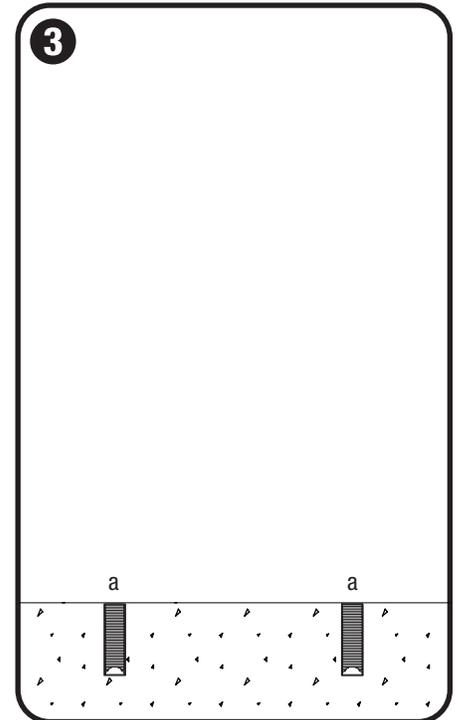
- Place the bollard in desired location. Mark center of each hole location (four total) with a pencil. Mounting holes are located on the bollard's base plate.



#### Drill holes

- Use hammer drill to drill 4.5" deep x 3/4" diameter anchor holes at each marked location using a 3/4" drill bit suitable for concrete drilling.

NOTE: Forms+Surfaces recommends starting holes with 1/4" diameter drill bit followed by 1/2" and finally 3/4" for maximum accuracy.



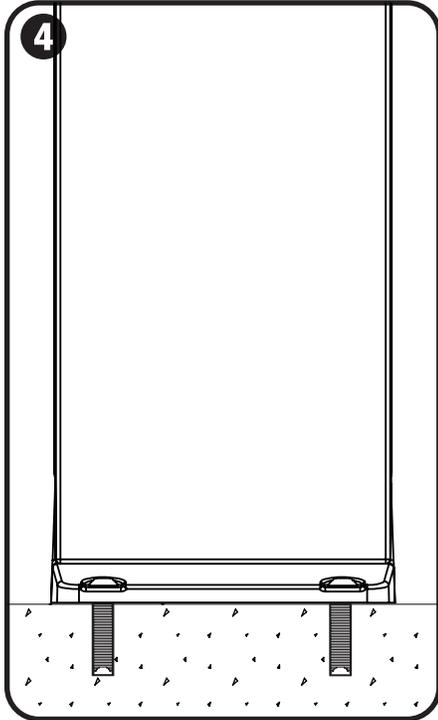
#### Fill holes & insert anchors

- Use compressed air and steel wire brush to clean each anchor hole in accordance with epoxy instructions.
- Use epoxy in epoxy gun to fill each anchor hole 5/8" of the hole depth in accordance with epoxy instructions.
- Insert 3/8"-13 x 4-1/4" epoxy anchor (a) into each anchor hole so anchor top is flush with ground. Allow proper curing time according to cure schedule on epoxy instructions before moving on to step 4.

# TANGENT™ BOLLARD

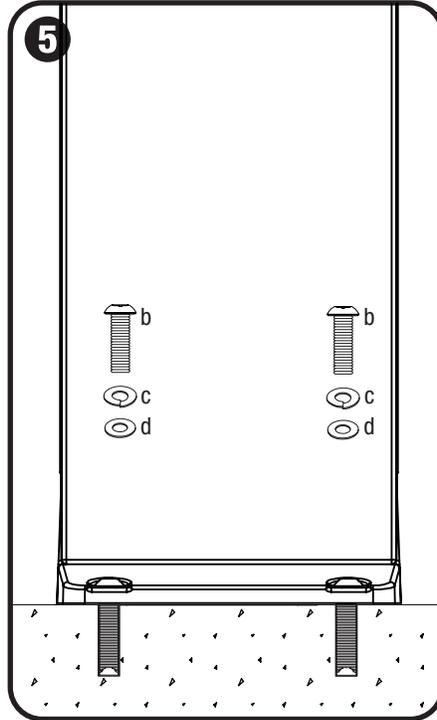
SURFACE MOUNT INSTALLATION INSTRUCTIONS

## STEP BY STEP FOR ALL TANGENT BOLLARDS



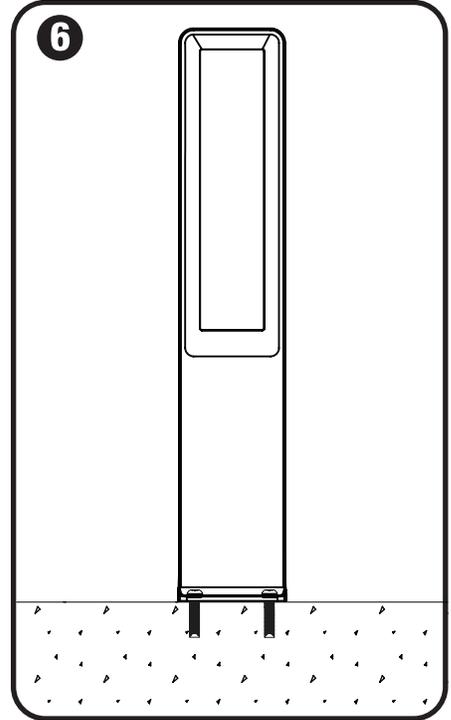
### Position bollard

- Position bollard so that mounting holes line up with anchors.



### Attach bollard

- Slide 3/8" stainless steel lock washer (c), and 3/8" stainless steel flat washer (d), onto each 3/8"-13 x 3" tamper-resistant button head cap bolt (b).
- Insert bolts into mounting holes in the bollard's base plate and thread into anchors using 3/16" hex bit for tamper-resistant bolts.



### Tighten bolts

- Tighten bolts until snug.