

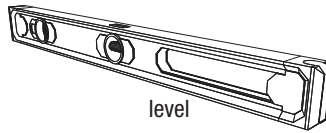
KNIGHT™ BOLLARD

S10 SECURITY CORE INSTALLATION INSTRUCTIONS

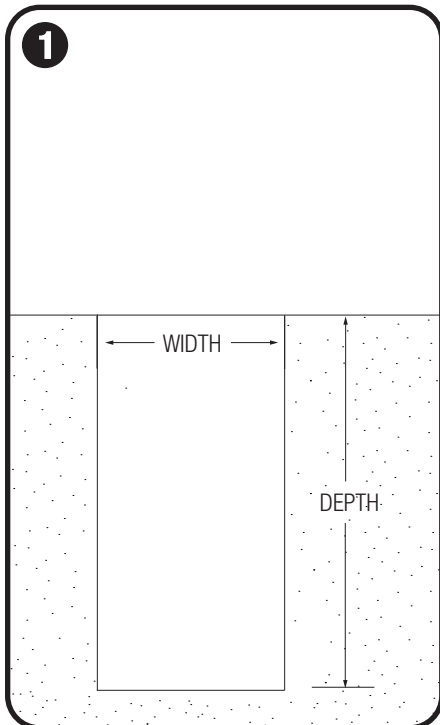
MATERIALS INCLUDED



TOOLS NEEDED

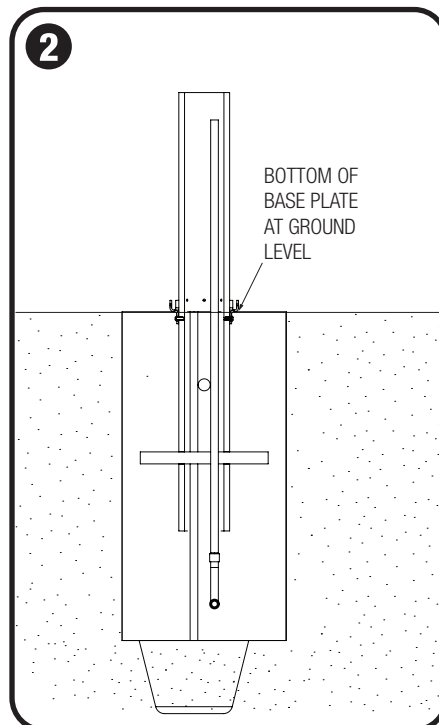


STEP BY STEP FOR ALL KNIGHT BOLLARDS WITH S10 SECURITY CORE



Create space for footer

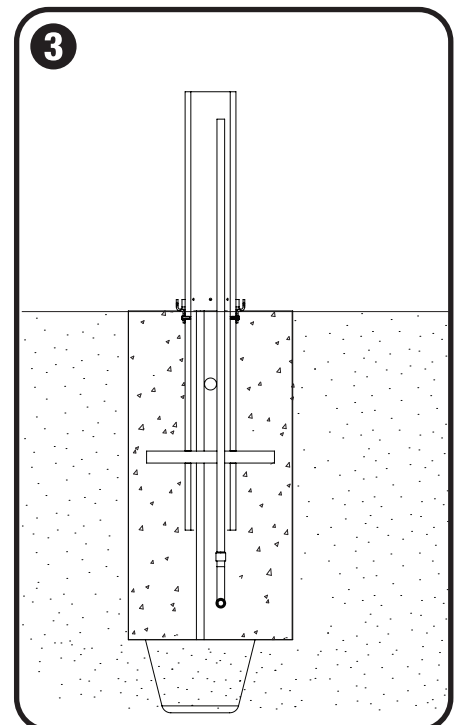
- A sufficient footer size depends on frost and other conditions to be determined by the installer. A minimum of an 18" x 18" wide x 36" deep footer is recommended for a single S10-P1 bollard installation.



Prepare foundation and position security core

- Refer to foundation detail drawings for specifications required to support S10 security rating.
- Position security core in desired final location and prepare rebar per foundation drawings.
- The bottom of the base plate should be level with the ground surface.

NOTE: The security core also serves as a conduit path.



Pour concrete foundation

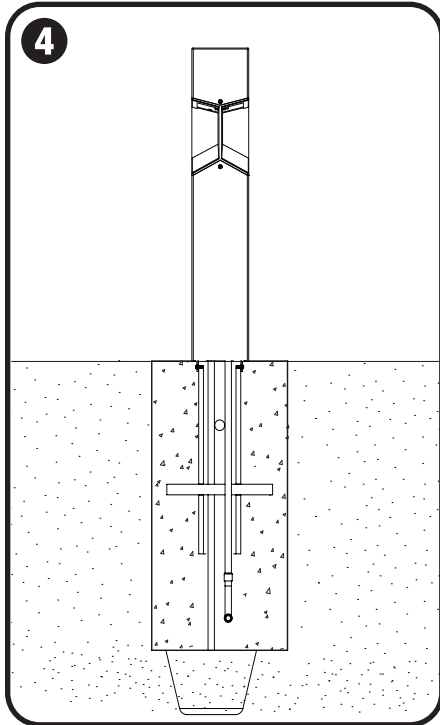
- Mix and pour concrete according to concrete manufacturer's instructions.
- As soon as concrete is poured, verify levelness.
- Allow concrete to cure completely according to concrete manufacturer's instructions before removing any temporary supports or installing fixture.

NOTE: Security core will need to be free of moisture prior to fixture installation.

KNIGHT™ BOLLARD

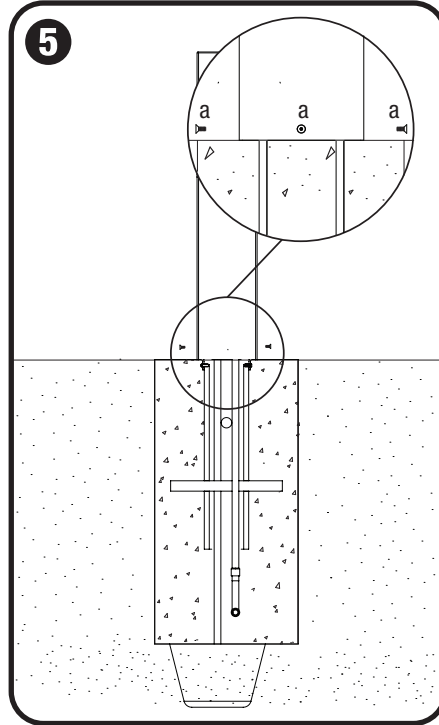
S10 SECURITY CORE INSTALLATION INSTRUCTIONS

STEP BY STEP FOR ALL KNIGHT BOLLARDS WITH S10 SECURITY CORE



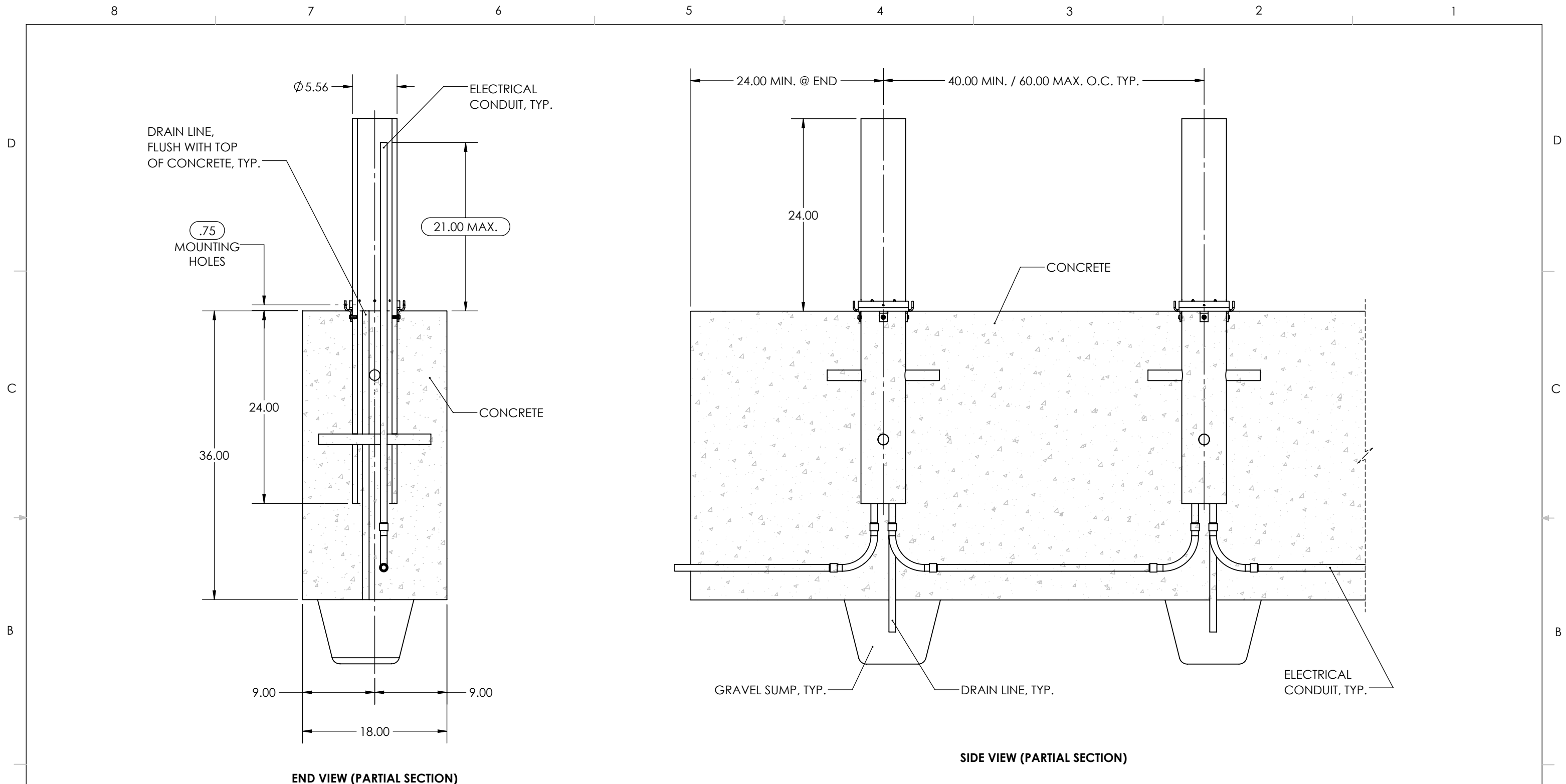
Position bollard over security core

- Inspect security core for moisture. If moisture is present, dry entirely before installing fixture. Do not install fixture unless security core is completely dry.
- Slide bollard over security core so that mounting holes in bollard body align with tapped holes in security core.



Attach bollard to security core

- Thread 1/4"-20 x 3/4" flat head cap bolt (a) into each lower hole in bollard.
- Use 5/32" hex bit or key to tighten all bolts until snug.



END VIEW (PARTIAL SECTION)

SIDE VIEW (PARTIAL SECTION)

NOTES:

1. FOOTINGS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED SOIL OR PROPERLY COMPACTED ENGINEERED FILL ASSUMING A NET BEARING CAPACITY OF 3000 PSF.
2. CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301) OF THE AMERICAN CONCRETE INSTITUTE (EDITIONS AS REQUIRED BY GOVERNING CODE).
3. CAST-IN-PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH (F'c) OF 5000 PSI UNO.
4. PROVIDE 6% (+/-1.5%) AIR ENTRAINMENT IN CONCRETE EXPOSED TO FREEZE/THAW.

UNLESS OTHERWISE SPECIFIED:
 1. PRIMARY DIM. ARE IN INCHES & SECONDARY [DIM] IN MM
 2. TOLERANCES
 FRACTIONAL: ±1/32; ANGULAR/BEND: ±1°
 TWO PLACE DECIMAL ±.030
 THREE PLACE DECIMAL ±.020
 3. REMOVE ALL BURRS AND SHARP EDGES
 THIRD ANGLE PROJECTION
 MATERIAL: N/A
 FINISH: N/A
 WEIGHT: N/A
 SCALE: NOT TO SCALE

FORMS+SURFACES 30 Pine Street, Pittsburgh, PA 15223
 Tel (412) 781-9003 Fax (412) 781-7840

NAME	DATE
DWN	RTS
CHK	06/08/22

DESCRIPTION:			
FORMS+SURFACES			
S10-P1 SECURITY CORE, KNIGHT			
CONTINUOUS STRIP FOUNDATION			
SIZE	DWG. NO.	REV	SHEET
B	S10-LBKNI-INSTALL	0	1 OF 1

REV.	DESCRIPTION	REVISED BY	DATE
0	INITIAL RELEASE	-----	-----