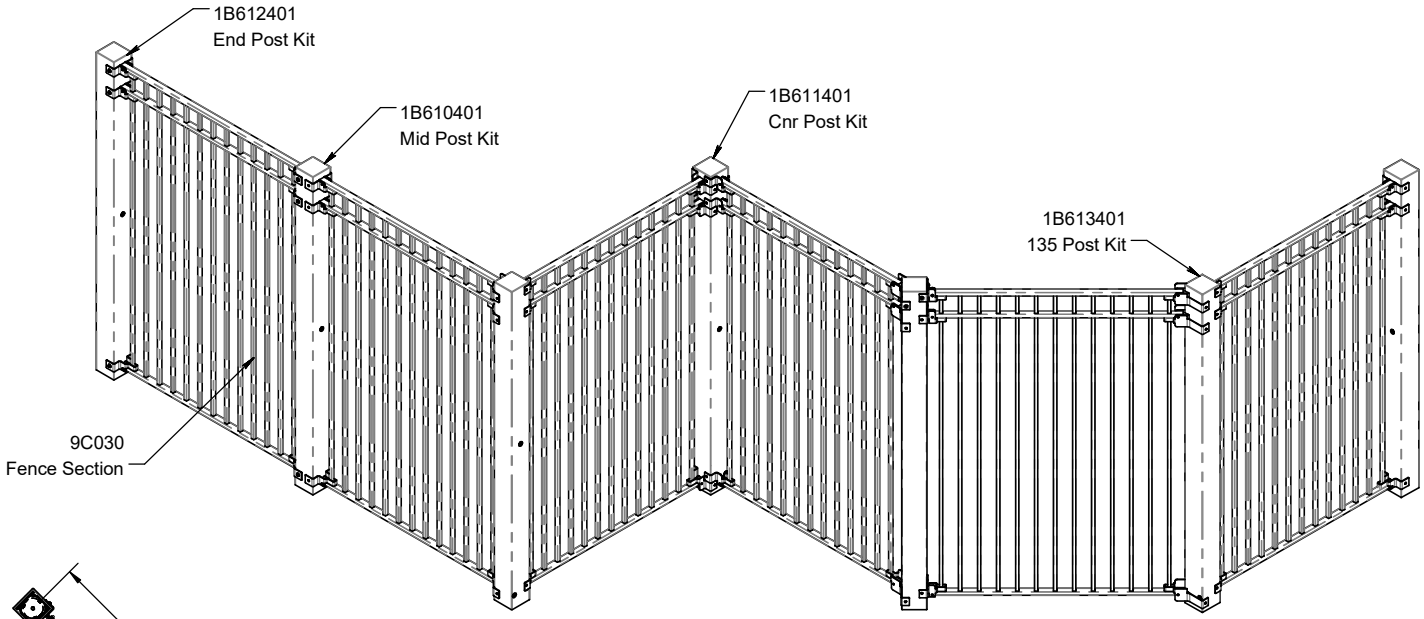
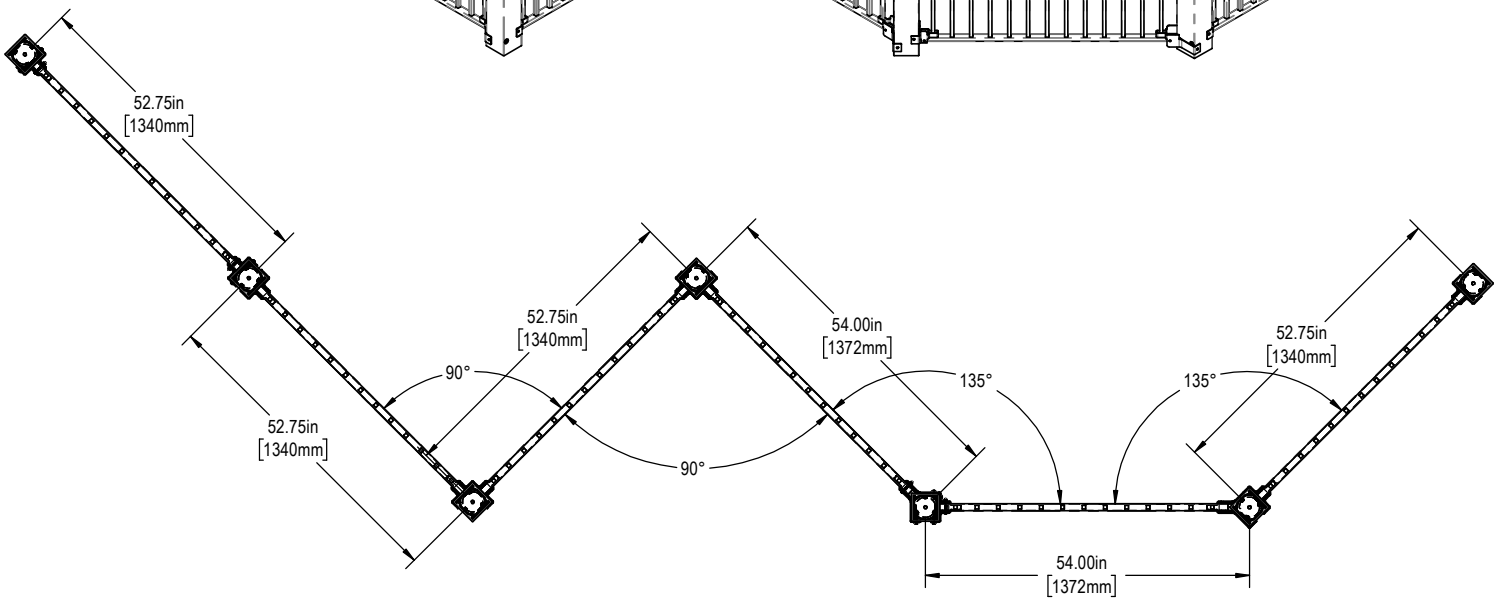
# CrashCore Ornamental Fence S10

## Installation Instructions




REV 0 10/09/2026

All purchases subject to McCue Limited Warranty & Purchase Terms
available at www.mccue.com/support/warranty

Questions

**McCue Corporation**
Danvers, Massachusetts, USA
+1(800) 800 8503
cservices@mccue.com

**McCue UK**
Milton Keynes, United Kingdom
+44 (0)1908 365 511
uksales@mccue.com

**McCue Asia**
Xiamen, Fujian, China
+8 592 2200790
rchen@mccue.com

**McCue Europe**
Magirus-Deutz-Straße 14
89077 Ulm, Germany
+49 731 40 38 82 68
eusales@mccue.com

mccue.com

# Suggested Tool List

Below you will find the suggested tools for a deep cage CrashCore Bollard installation

## EQUIPMENT

- ☐ Skid Steer with 12” Auger & Bucket Attachments
- ☐ Core Drill with 12″ Diamond Core Bit
- ☐ Small Concrete Mixer or 5 Gallon bucket with Concrete Paddle Mixer
- ☐ Gas-Powered Generator
- ☐ Wet/Dry Vacuum
- ☐ Pressure Washer
- ☐ Portable Work Lights (If Night Work)
- ☐ Cordless Blower
- ☐ Pallet Jack with 5000 lb Capacity
- ☐ Cordless Impact Driver
- ☐ Dumpster
- ☐ Circular saw
- ☐ Wood to make trench

## HARDWARE & SUPPLIES

- ☐ Fast-Setting Concrete Mix with Minimum 3000 psi — Approximately 3.4 cubic feet Per Bollard
- ☐ 5/16” Allen Key or Hex Bit
- ☐ Towels or Rags for Cleaning
- ☐ Soft microfiber cloth

## TOOLS

- ☐ Chalk for Marking Concrete, Chalk Line
- ☐ Chalk Line or Laser
- ☐ Tape Measure
- ☐ 24″ Push Broom
- ☐ 7″ Corn Hand Broom
- ☐ Finishing Trowel
- ☐ Flat Transfer Shovel
- ☐ Round Point Shovel
- ☐ Inverted aerosol spray
- ☐ Level
- ☐ Extension Cord
- ☐ 48″ Post Hole Digger
- ☐ Wheelbarrow
- ☐ Web Slings for Lifting at least 1000 lb Capacity
- ☐ Square with at least 2 ft Blade
- ☐ 3/4″ Water Hose with Hose Head Nozzle
- ☐ Steel Drilling Hammer or Dead Blow Hammer
- ☐ Shut-Off Valve Wrench (Water Security Key)
- ☐ 2 Adjustable Pipe Wrenches
- ☐ Utility Knife
- ☐ String or Wire
- ☐ Digging Bar
- ☐ Camera or Smart Phone

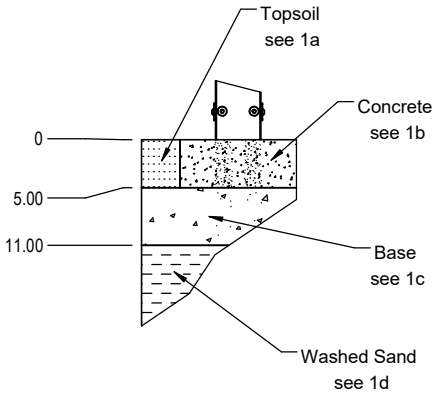
## PPE

- ☐ Dust Mask
- ☐ Eye Protection
- ☐ Steel Toe Boots
- ☐ Ear Protection
- ☐ Gloves

## OH SH!T LIST

- ☐ Cones
- ☐ Caution Tape
- ☐ Metal Barricade
- ☐ Flat Head Screw Driver
- ☐ Hex Allen Key Set 5/32"
- ☐ Phillips Screw Bit
- ☐ Steel Tamper
- ☐ Jack Hammer
- ☐ 1/2″ - 13 Tap
- ☐ 3/8″ - 16 Tap
- ☐ Drill Bit 5/16"
- ☐ 3/8″ or #3 Rebar Cut to 60.75″ & 10" (See Step 3)
- ☐ Rebar ties
- ☐ Masking Tape
- ☐ Tarp

## MINIMUM GROUND CONDITIONS REQUIRED

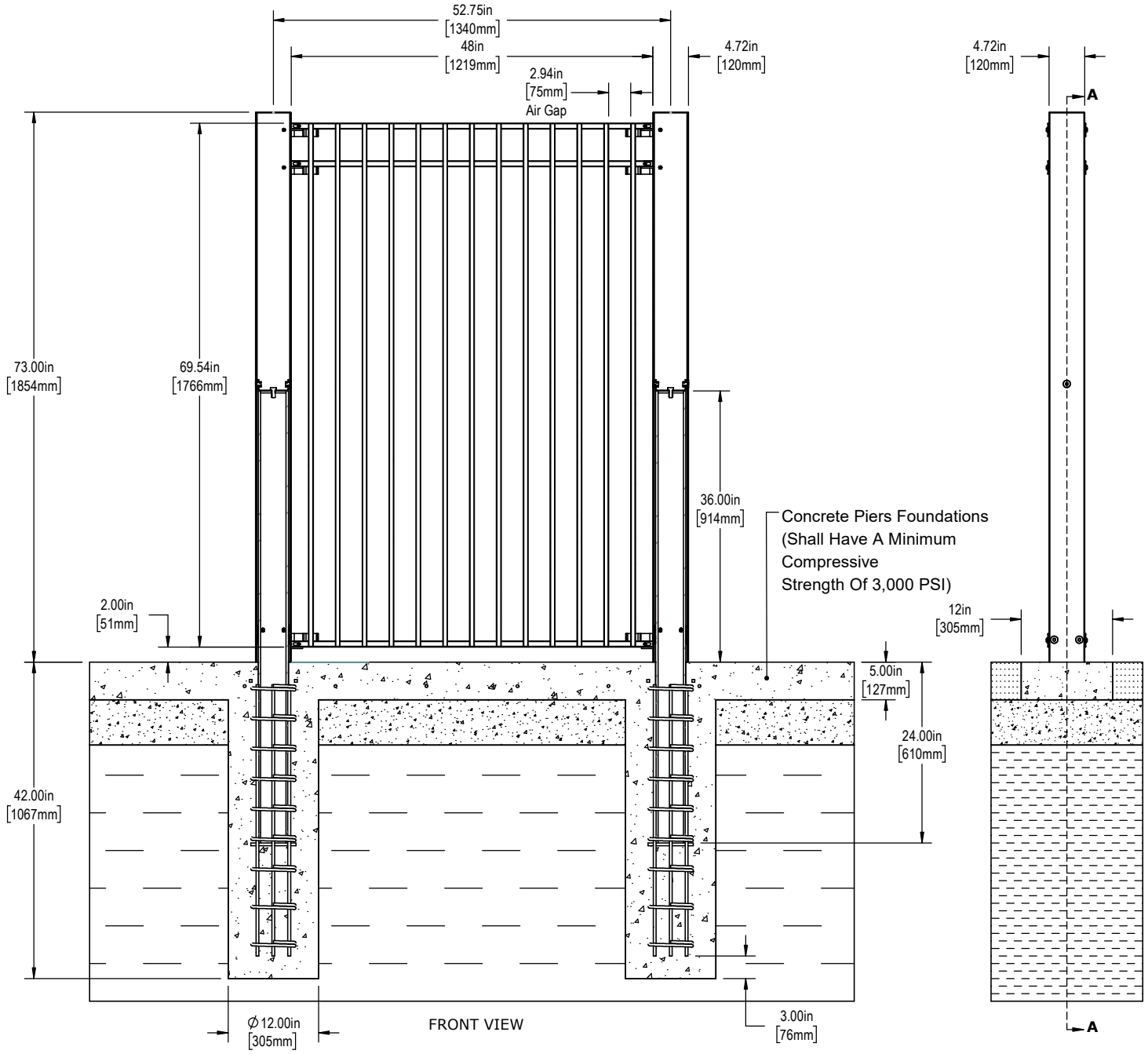



☐ 1a: Topsoil shall be loose, triable, loamy, free of suboil, clay lumps, stones, roots, and other foreign or toxic matter, and shall contain 3% to 20% organic matter as determined by the loss of ignition of moisture-free samples dried at 100 degrees Celcius.

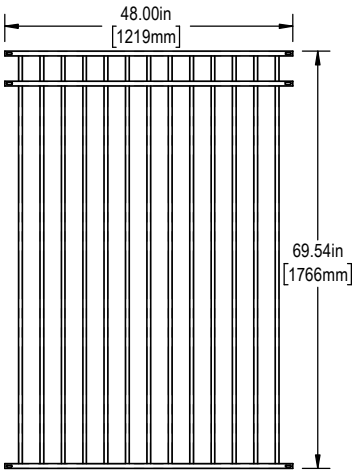
☐ 1b: The concrete is 3000 psi minimum unconfined compressive strength, with one layer of #3 ( ∅ 3/8") rebar spaced at 12" each way, with 1-1/4" cover at bottom. Rebar not shown here.

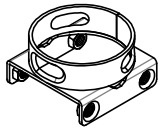
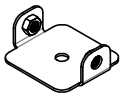
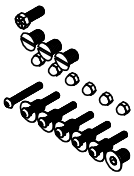
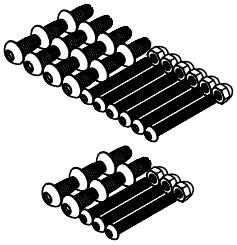
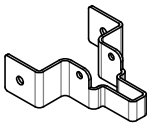
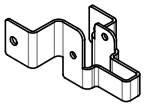
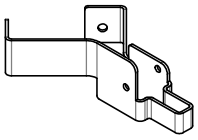
☐ 1c: The base is Type A Grade 1 crushed limestone road base, compated to 90% of standard proctor density.

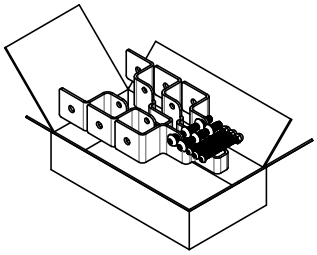
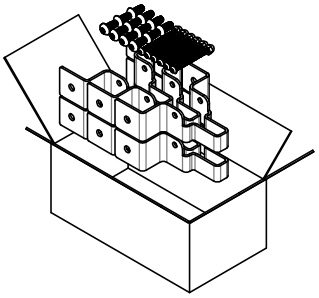
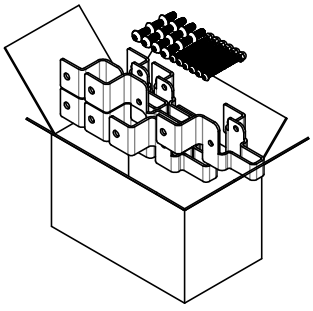
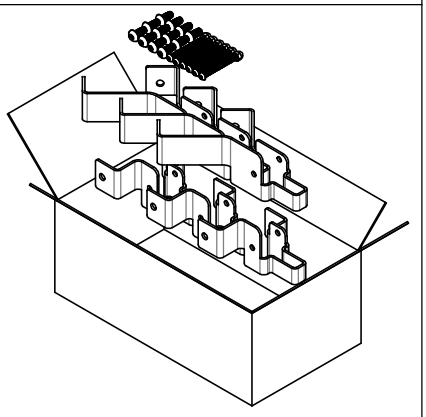
☐ 1d: The washed sand shall be classified as SP - poorly graded sand & be compacted to a density of not less than 90% maximum dry density in accordance with AASHTO Method of Test T099.



# CrashCore Ornamental Fence S10 Components
# Bill of Materials

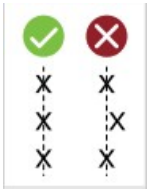
| 9C030 FENCE SECTION 69.54 X 48 | 9C028 END POST 4X4X73 | 9C027 CNR POST 4X4X73 | 9C026 MID POST 4X4X73 | 9C058 135 POST 4X4X73 | 1B002 S10 DEEP STEEL CORE | 2B001 S20 REBAR CAGE |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |

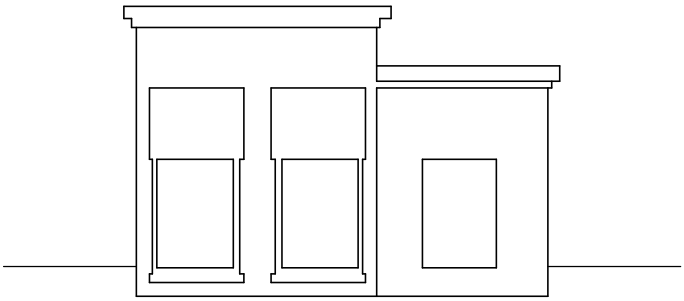
| 9C500 SLOTTED FENCE POST BRKT | 9C501 UPPER ALIGN BRKT | 9H501 HARDWARE KIT | 9H514 HARDWARE KIT (6) OR 9H515 HARDWARE KIT (3) | 9C145 END-MID POST LOCK BRACKET | 9C149 CNR POST LOCK BRACKET | 9C150 135 POST LOCK BRACKET |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |

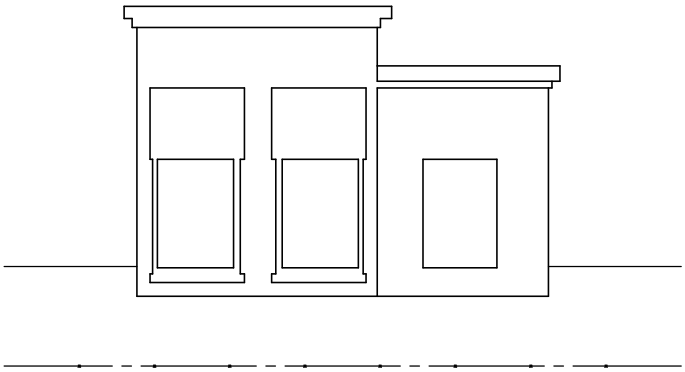
| 9C632 ORN FENCE END POST (3) BRACKET KIT BLACK | 9C633 ORN FENCE MID POST (6) BRACKET KIT BLACK | 9C634 ORN FENCE CNR POST (6) BRACKET KIT BLACK | 9C635 ORN FENCE 135 CNR POST (6) BRACKET KIT BLACK |
|---|---|---|---|
|  |  |  |  |

## Step 1

PHOTOGRAPH: Take wide angle photo including entire site. Layout and Mark bollard location per print.

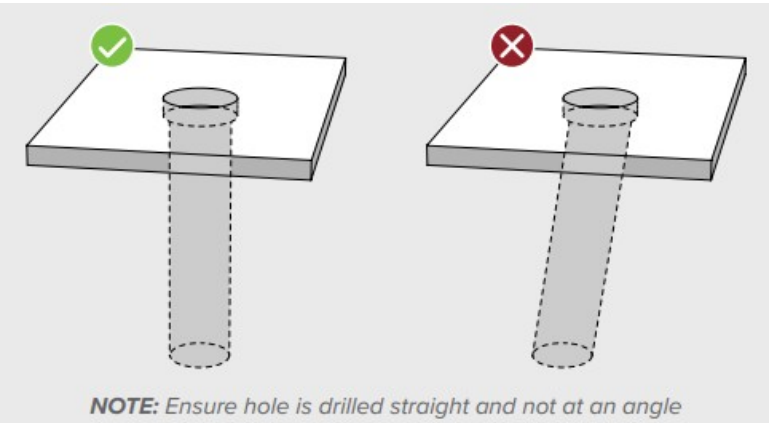


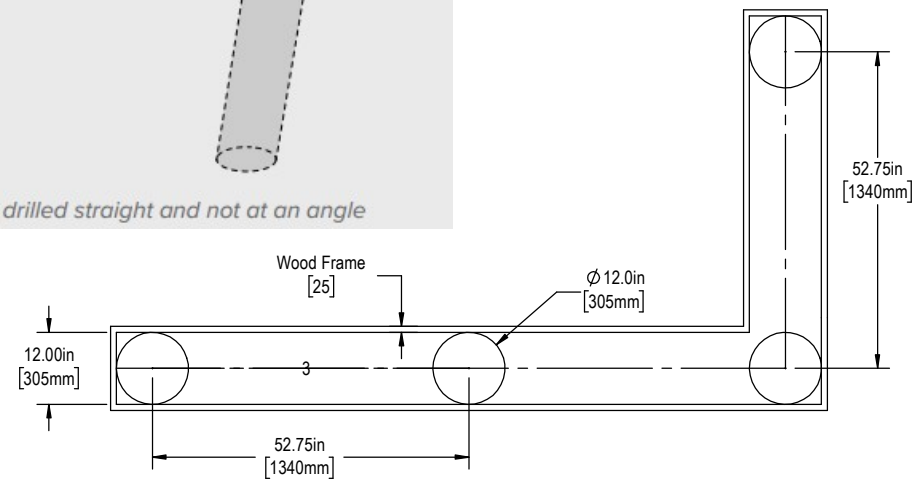




## Step 2

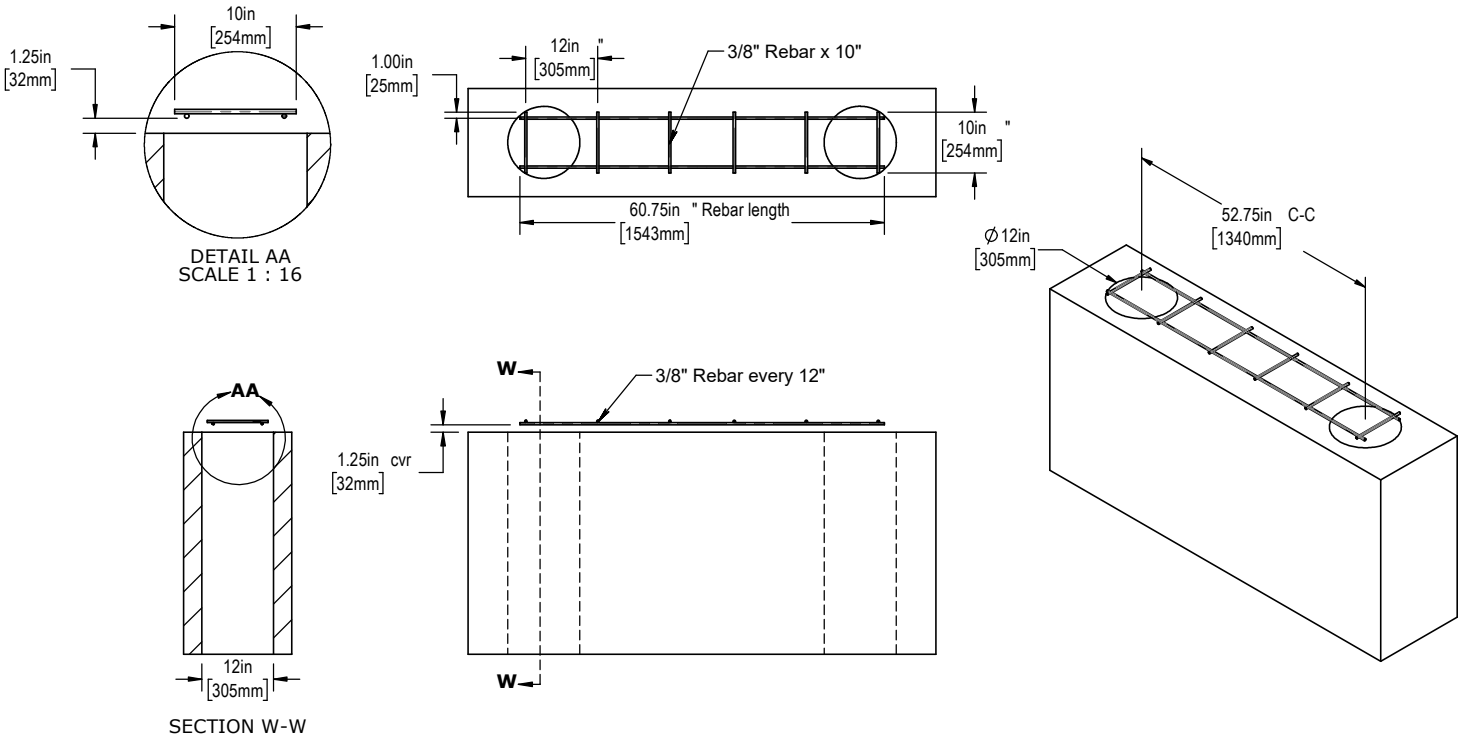
Remove Topsoil layer and layout and mark bollard and trench according to print. The connecting 12" wide x 5" thick trench needs to connect all bollards. Using the 12" diameter auger remove earth from hole to a 42in depth. Take photos of depth and diameter of hole.



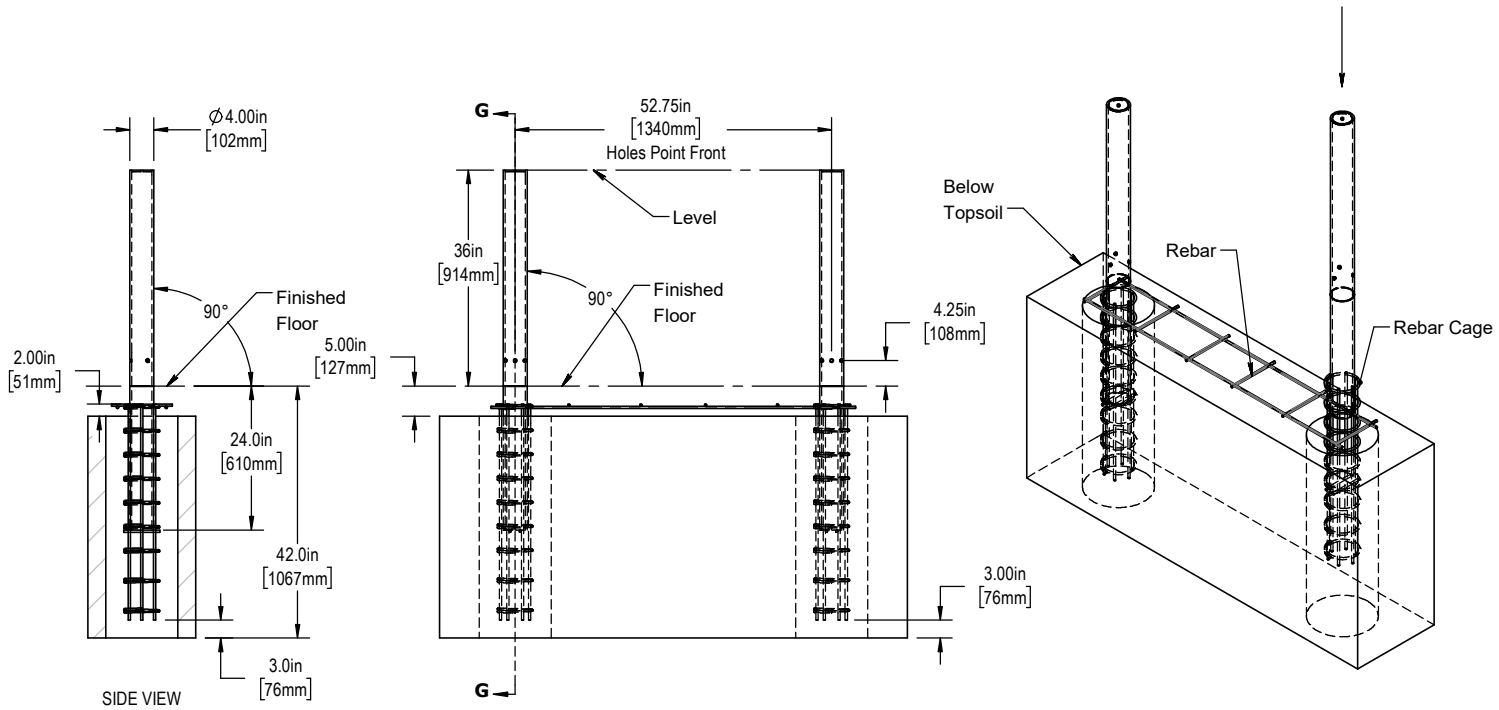
## Step 3

INSTALLER RESPONSIBLE for Reinforcement: #3 (3/8") rebar, rebar ties, wire pliers. Place two rebars running the length, 1-1/4" cvr. take a look at details. Place 10" long pieces spaced every 12" on top of two 60.75" rebar length rebars.



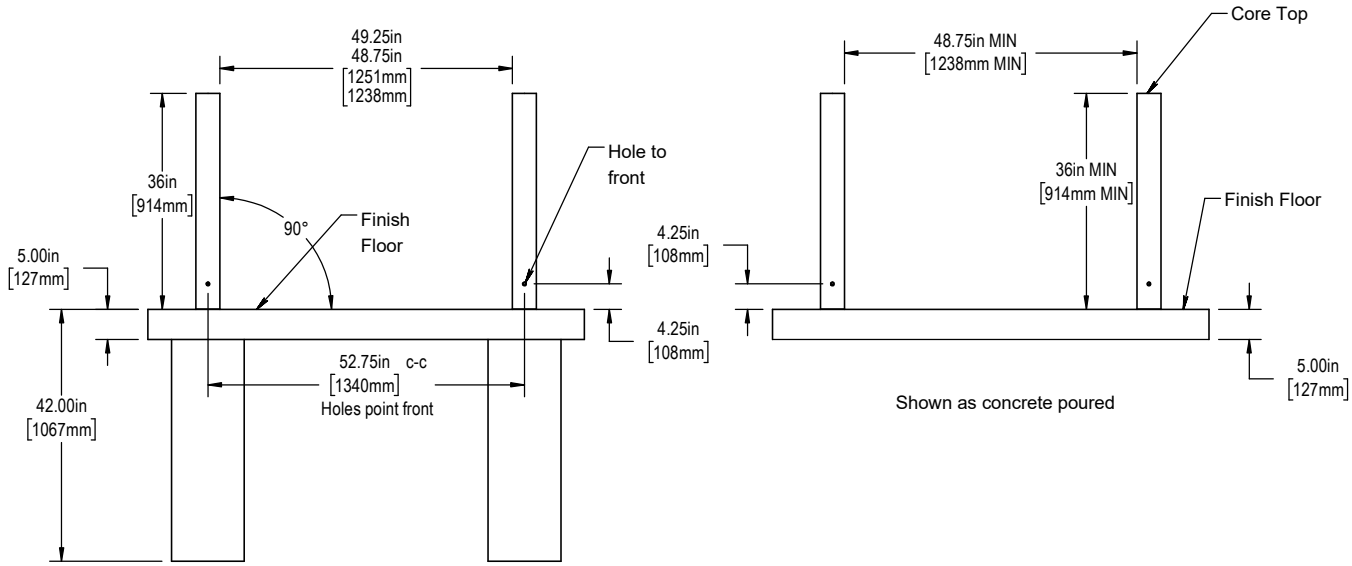

## Step 4

Build a sturdy mold or Formwork for concrete footing, that holds wet concrete. Trench needs to connect all bollards continuously. Lower rebar cage 3" from ground and straight. Lower the 64 lb core into the cage. Ensure one tapped hole is facing front and that core is plumb.



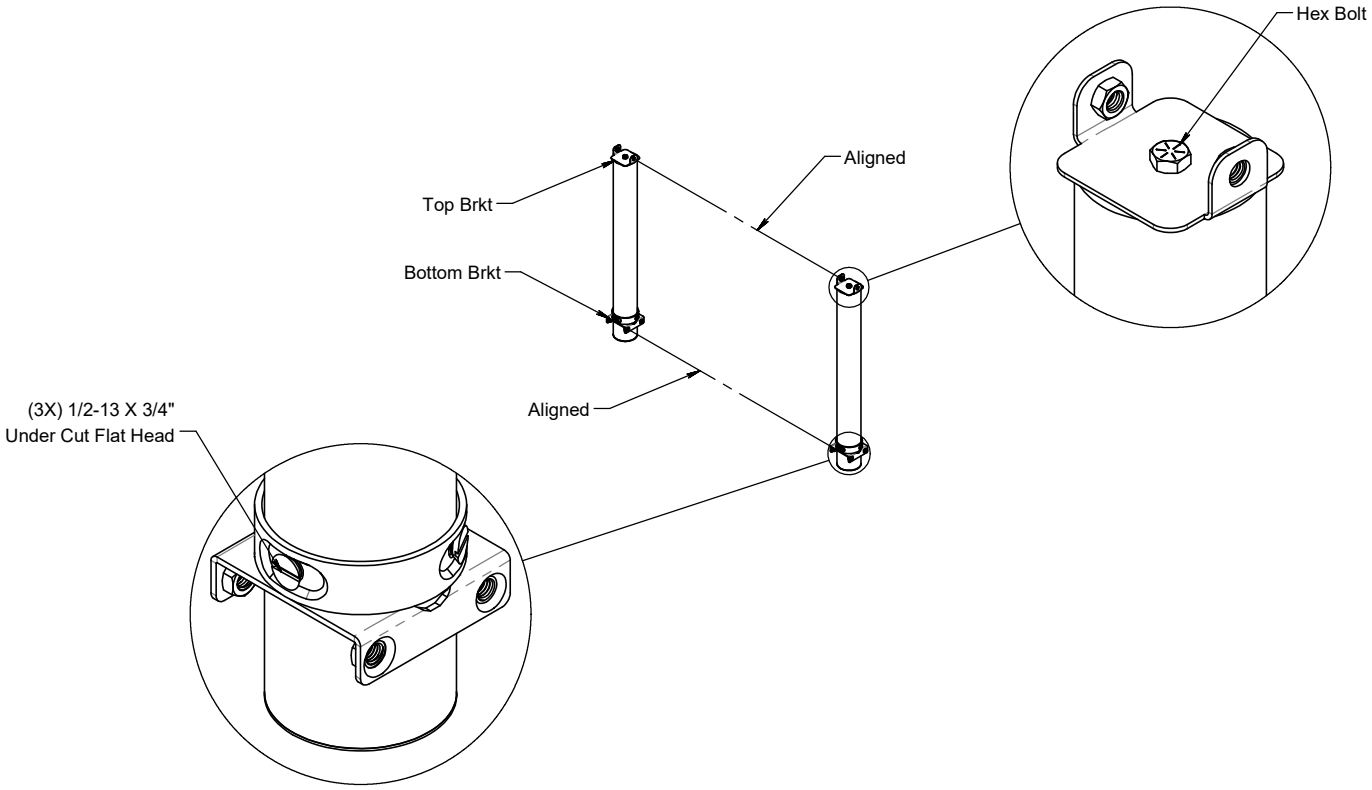
## Step 5

Make sure a minimum of 36" Height from the Core top to finish floor is maintained. Internal dimension from core to core is 48.75" Min to 49.25" Max Between End, Mid and 90 ° Cnr posts. Note; 135 ° Cnr post to Cnr Post Internal dimension 50.0" Min to 50.50". Front Holes are aligned to true front. Mix & place 3,000 PSI minimum concrete into the holes and all the way up to the trench finished Floor. Cores are to be leveled both front and side, while concrete is wet. Volume of concrete is 6.76 cu.ft per every two bollards and trench connecting.



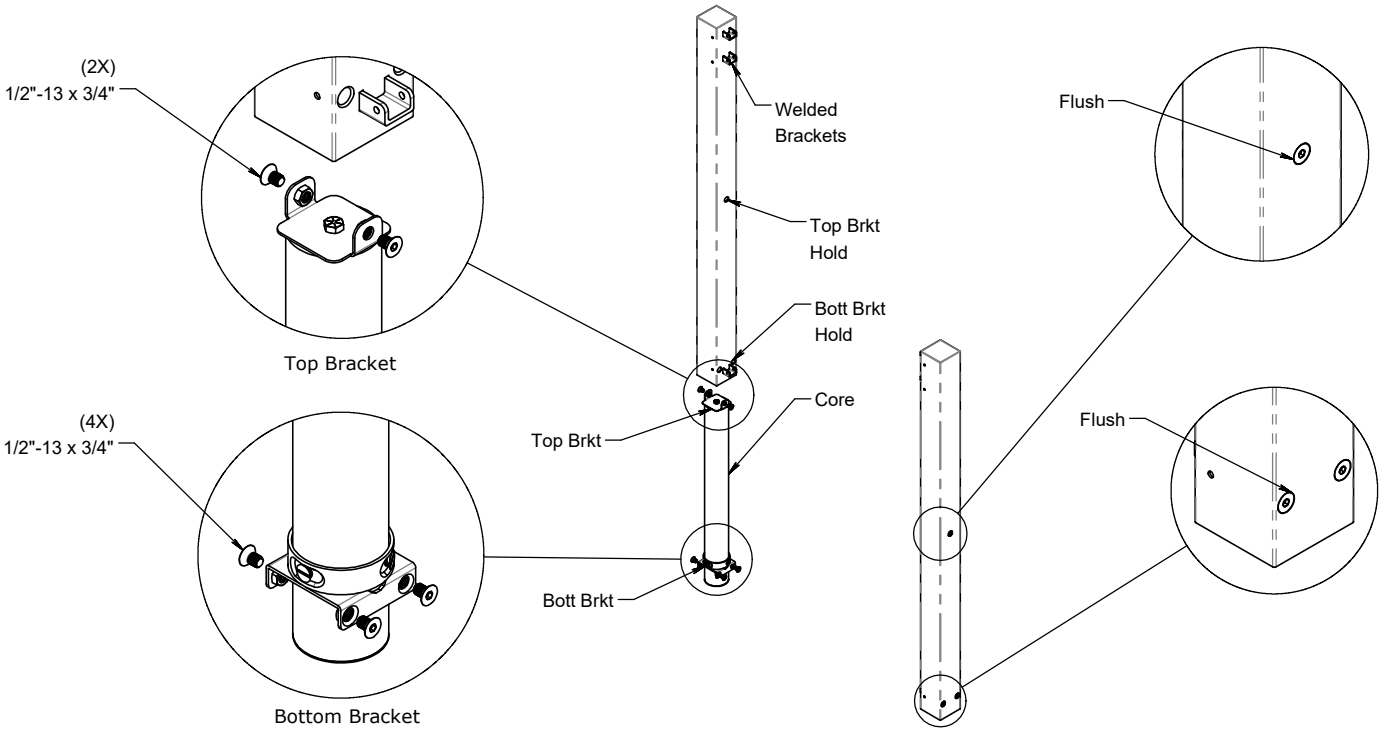

## Step 6

Slide bottom brackets and secure to core with (3) 1/2-13 x 3/4" Flat Head under cut screws. Secure top bracket to core with (1) 1/2-13 x 1" Hex Head screws. Welded nuts should be looking at each other and aligned.



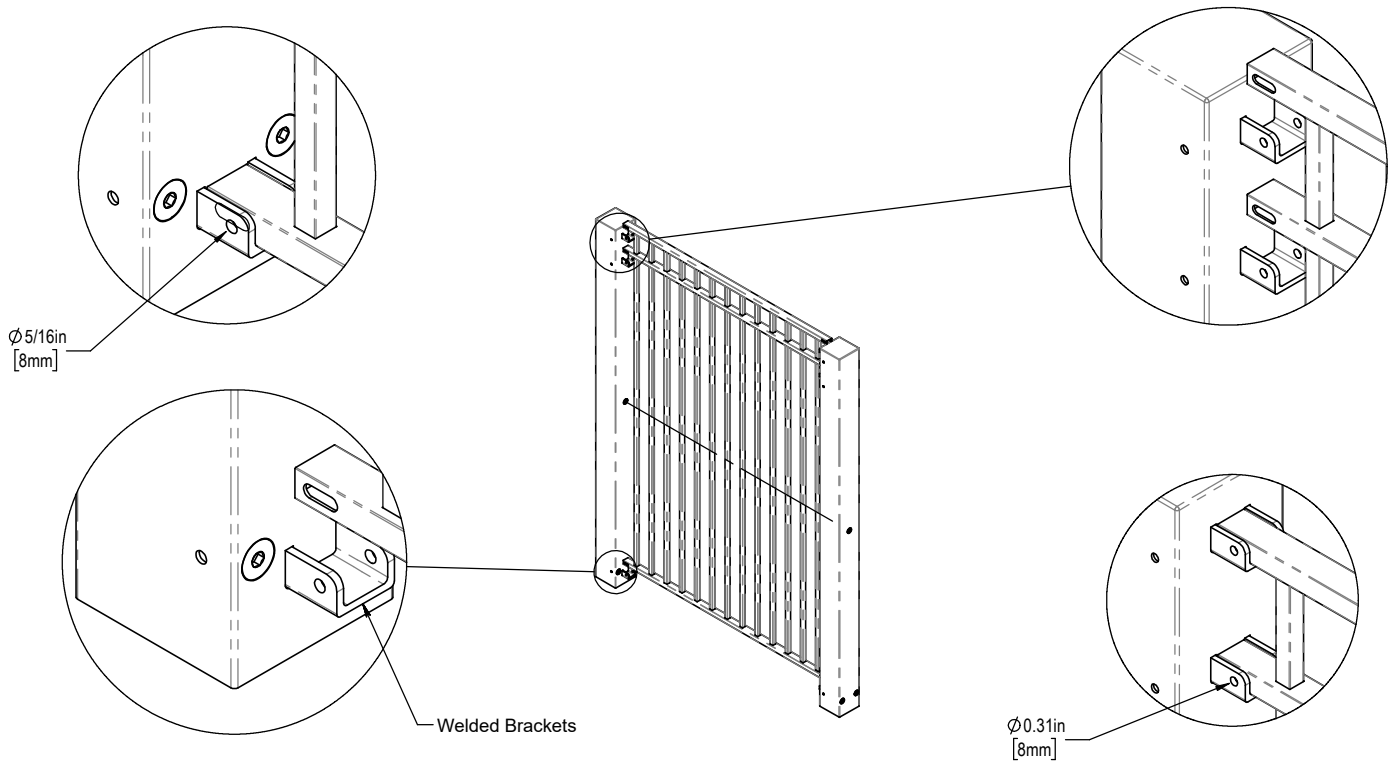
## Step 7

Slide uprights over cores and make sure the welded brackets are pointing to fence direction. Secure uprights to top and bottom brackets with (6) 1/2-13 x 3/4" Flat Head Screws using 5/16" L key.



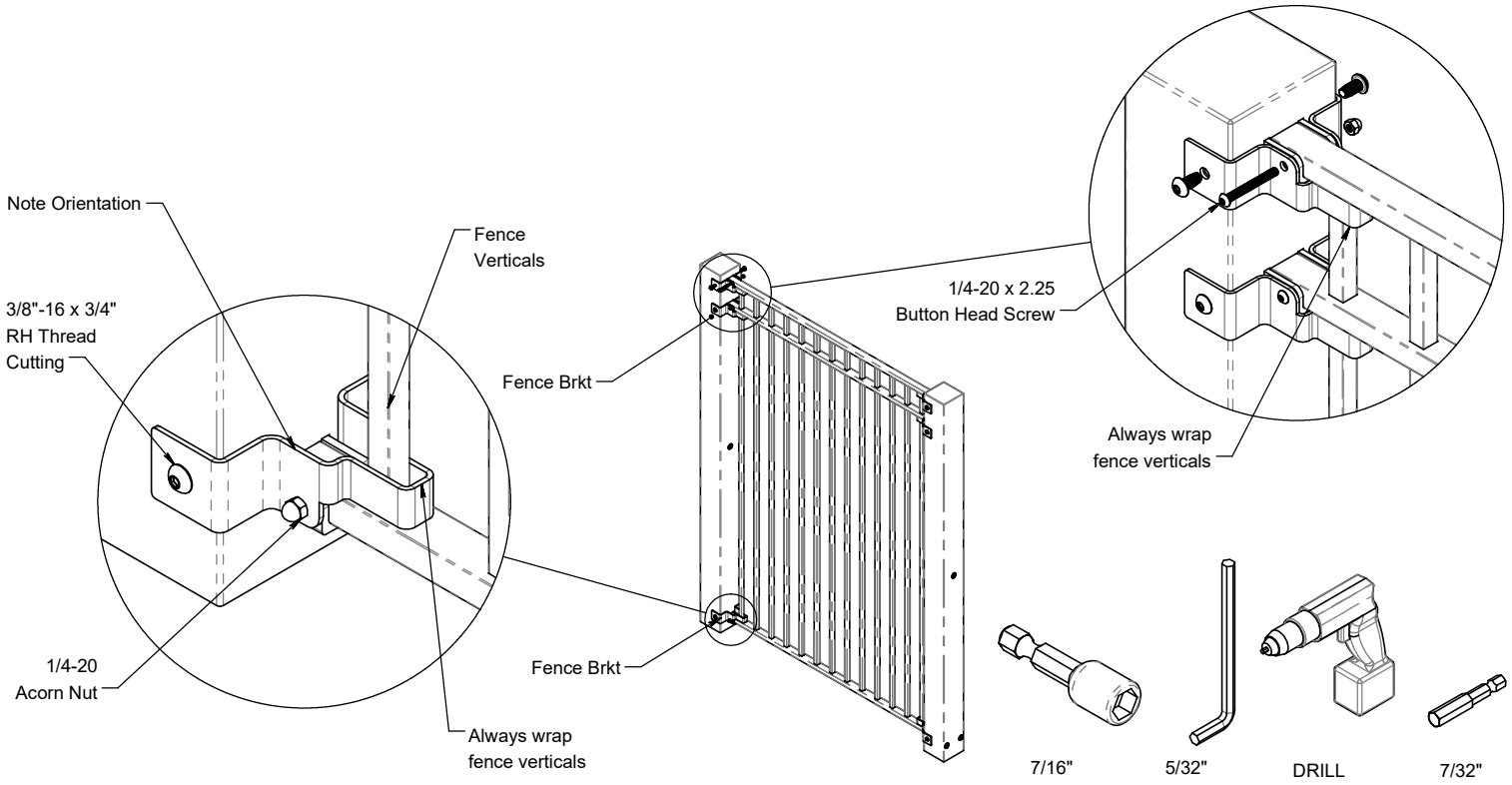

## Step 8

Slide fence onto uprights welded brackets just for position. Note; a 5/16" diameter drill bit can be used to clear a bolt to pass thru if necessary.



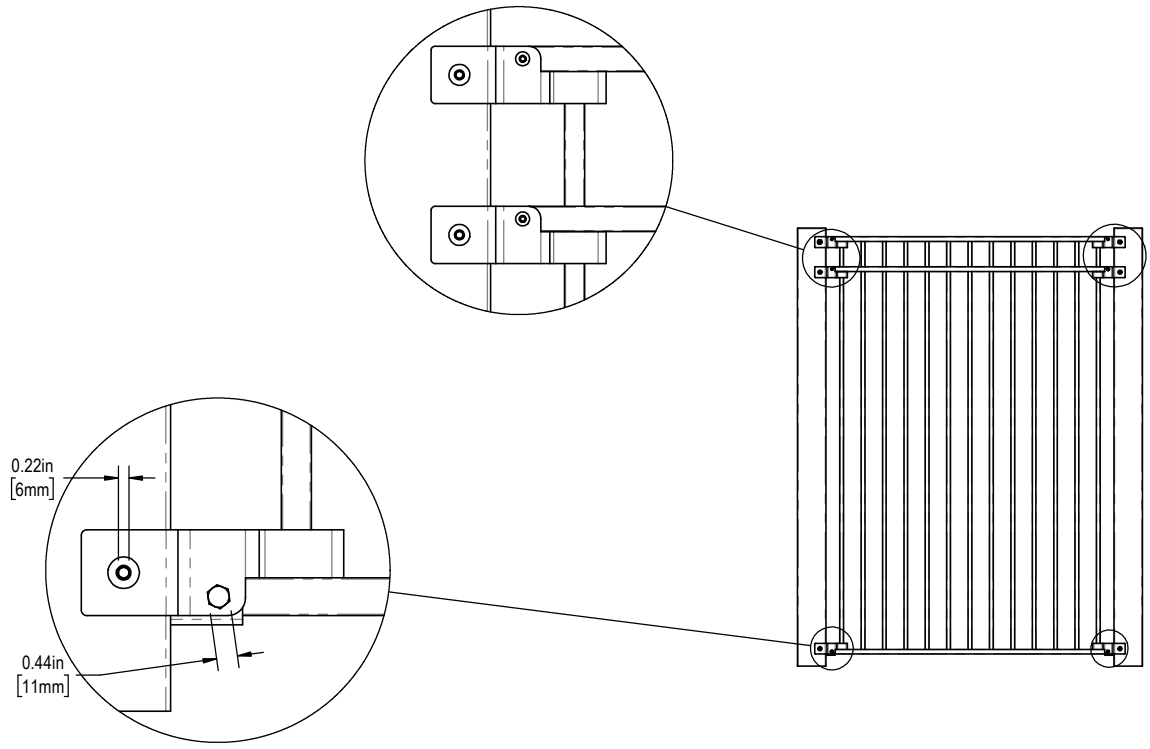
## Step 9

Slide fence brackets over fence vertical as shown and secure to upright with (1) 1/4-20 x 2.25 BHS and (1) 1/4-20 Acorn Nut. Secure with (2) 3/8-16x3/4" self tapping screws. Repeat to all brackets. Note: Use a 11/32" Diameter Drill bit to create pilot holes on post if needed. Use drill with 7/32" hex bit to drive 3/8" screws.



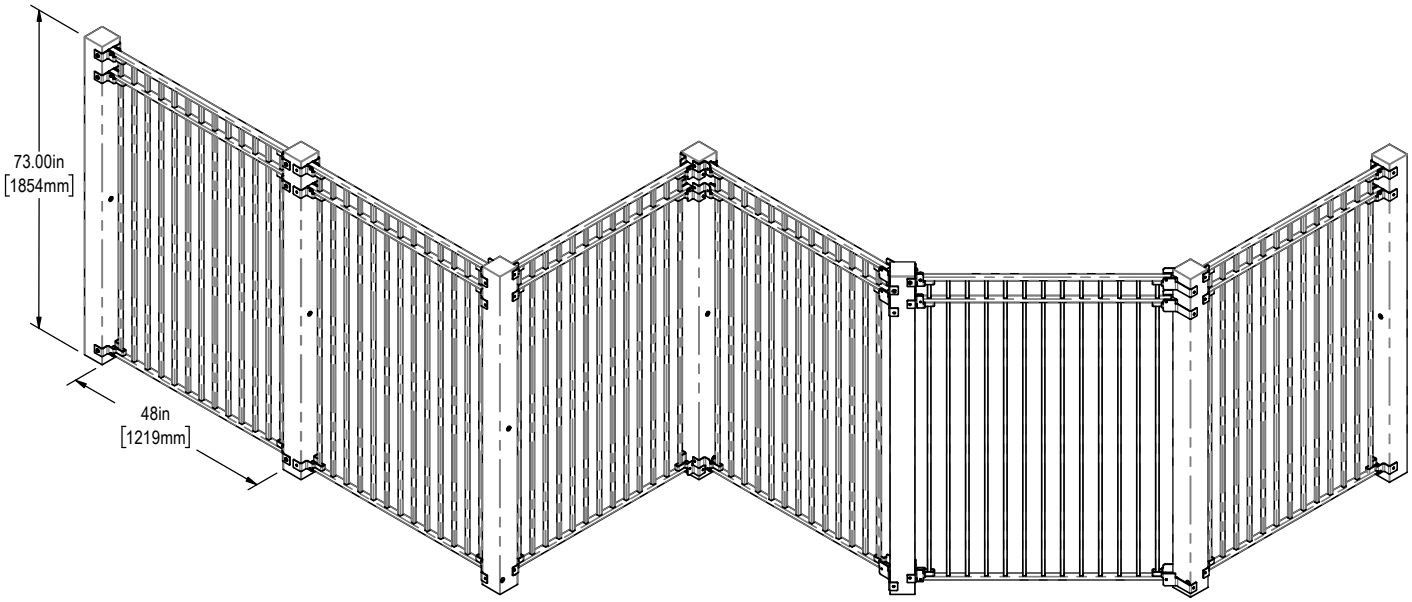

## Step 10

Make sure each post to fence connection is secured with brackets and all the screws necessary.



## Step 11

PHOTOGRAPH: Take photos of completed installation,  fence height & typical spacing.

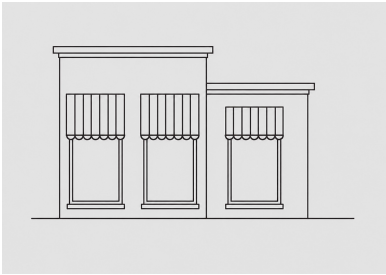



# Installation Checklist

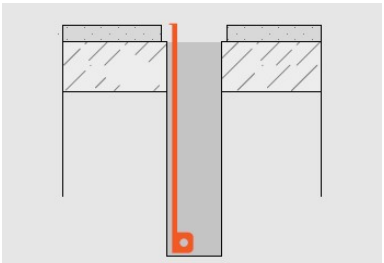
Ensure all items are complete before finishing installation

**Make sure each post to fence connection is secured with brackets and all the screws required**

**PHOTO CHECK:** Ensure to document the completion of each specified step that included a photo as shown below



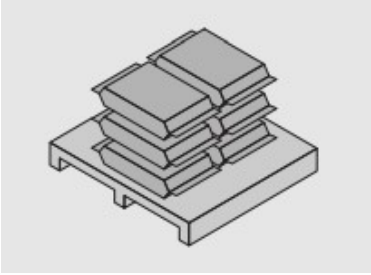
☐ Before Photo Of Work Site



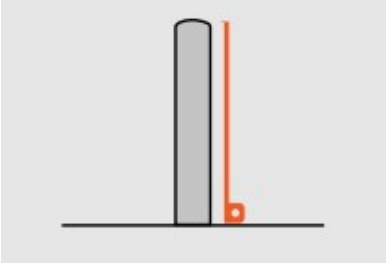
☐ 42" Deep Hole



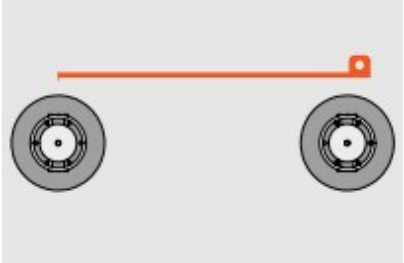
☐ 12" Diameter Hole



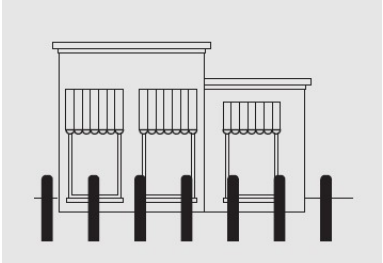
☐ Concrete Bag



☐ Overall Bollard Height



☐ Typical Bollard Spacing



☐ Finished Site Installation


Questions

**McCue Corporation**
Danvers, Massachusetts, USA
+1 (800) 800 8503
cservices@mccue.com

**McCue UK**
Milton Keynes, United Kingdom
+44 (0)1908 365 511
uksales@mccue.com

**McCue Asia**
迈客(厦门)有限公司
Xiamen, Fujian, China
+86-592-220079
rchen@mccue.com

**McCue Europe**
Magirus-Deutz-Straße 14
89077 Ulm, Germany
+49 731 40 38 82 68
eusales@mccue.com

mccue.com