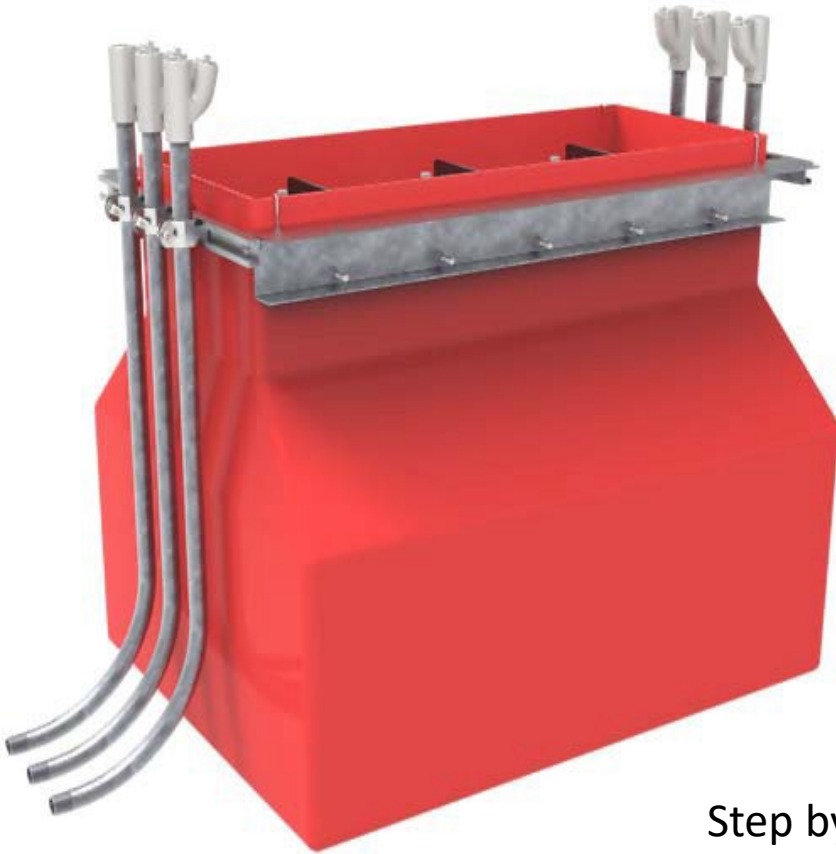


## B1000 / B1000E Series



Bravo's B1000 Series is designed for use with specific manufacturers' dispensers for secondary containment located beneath the dispensers.

Kits included  
K-100 Electrical Conduit Clamps  
K-202, 204, 206 or 208 Dispenser Anchor

### Step by step installation

- Step 1 –Positioning and Leveling to Grade
- Step 2 – Fitting Layout, Conduit Location and Preparation
- Step 3 – Piping Installation
- Step 4 – Fitting Integrity Testing
- Step 5 – Install hardware
- Step 6 – Back Fill and Concrete
- Step 7 – Verify all fasteners
- Step 8 – Install Dispensers
- Step 9 – Shear Valve installation
- Step 10 – Secure all Connections and Hardware
- Step 11 - Shear Valve Location and Adjustment



Safety First. S. Bravo Systems, Inc. recommends adherence to standard safety procedures and precautions provided by your company and to follow the regulations and compliances by OSHA, local, state and federal regulations regarding the use of this product.



UL2447 is the standard for secondary containment and covers sumps and lids, sump fittings and sump accessories. Products are tested in accelerated conditions that have long term use in environments with extreme heat and cold, aggressive biofuel and ethanol blends, and extreme soil environments.

**Get Bravo Certified Today – Contact Your Sales Manager**



# HOW TO INSTALL B1000 AND B1000E

## STEP 1 – POSITIONING AND LEVELING TO GRADE

1. Position shovel in a wide bed of pea gravel (at least 2" to 3") under each UDC to support its weight and help prevent movement / shifting during installation of piping and other components.
2. UDC frame of the B1000 Series should be a minimum ¼" above grade. The shear point is set by the stabilizer bar and bracket plate when installed properly to the manufactured specification.
3. Secure UDC in place using the metal frame to assist.

## STEP 2 - FITTING LAYOUT, CONDUIT LOCATION AND PREPARATION

1. Shear valve assembly and bracket. Measurements for the fittings should include the shear valve position and flex connector or rigid riser length. Staying 1" from the edge of the UDC will allow access for proper installation.
2. Determine piping centerlines and mark sump walls for entry fitting locations. Plan the fittings' layout so that the O.D. (outer diameters) of any fitting are at least 1" away from any edge.
3. Preparation of the fiberglass surface is key in installation. Follow fitting manufacturers' installation instructions.
4. Up to 5 conduit positions on either end of B1000 Series.

## STEP 3 – PIPE INSTALLATION

1. Reference site plans to provide locations to install the fittings. Follow pipe manufacturers' instructions.
2. For testing the primary pipe before bonding to the fiberglass fitting and then the secondary pipe can be terminated in the fitting.



# HOW TO INSTALL B1000 AND B1000E

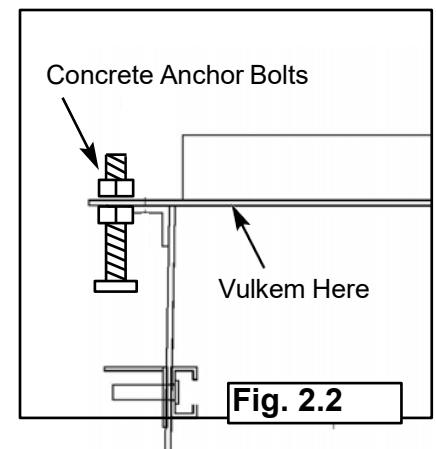
## STEP 4 – FITTING INTEGRITY TESTING

1. Sump must be supported from the bottom, 2” min. of pea gravel. Fill with water to 4” above the highest penetration or side wall seam. Look for leaks at the sealed joint, fittings, and all edges and corners. Monitor for one hour if the change is more than a 1/8” the integrity test has failed and further investigation is required. (PEI RP 1200)

Before hydrostatic testing remove debris from interior of the sump. Make sure the full cure cycle has occurred for all adhesives. Visually check all fittings at the 6 o'clock position prior to testing. Follow local regulations and state guidelines. Perform hydrostatic test, fill and observe all bonded areas, observe for full test observation period.

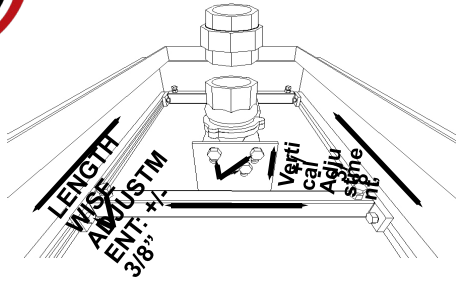
## STEP 5 – Install Hardware

1. Install dispenser mounting hardware concrete anchor bolts to dispenser frame as shown in Figure 2.2. Bravo UDC's are engineered to receive certain dispenser or pumps. If the selection process was accurate the hardware will align with the dispenser.
2. Backfill the site with available backfill material in preparation for concrete pouring.
3. Re-secure dispenser frame to the island supports so that it will not interfere with the concrete pour. When secure, proceed to pour concrete around UDC.





# HOW TO INSTALL B1000 AND B1000E



Length Adjustment  
Stabilizer Bar Fully Adjustable  
Vertical Adjustment in Bracket Plate 1" Adjustment

## STEP 6 – Backfill and Concrete

1. After verifying all UCD and Sumps on site have past the integrity which is required by Federal and local standards begin back fill process. Start the back fill process around equipment. Minimum of 2" pea gravel next to fiberglass equipment then appropriate backfill material. Ensure necessary access points can be reached.
2. The finish grade of concrete should direct water run off away from Secondary containment equipment.

## STEP 7 – Verify all Fasteners are Secured

1. 1. Verify all fasteners are secure from the Shear Valve and Bracket assembly.

## STEP 8 – Install Dispensers

1. Place dispenser on to Anchoring bolts in the UDC. Follow Dispenser Manufacturer specifications. Sump must be supported. The hydraulic cabinet should sit over the opening of the Under Dispenser Containment if the selection of the equipment is correct.

## STEP 9– Shear Valve Location And Adjustment

1. Install an anchor dispenser to UDC ensure bolts are tight. Follow dispenser manufacturers' guidelines.
2. Install bracket assembly and shear valve in appropriate location to make connection to dispenser inlet, according to industry standards. Bracket plate bolts may be adjusted to accommodate alignment. Tighten all bolts once alignment is satisfactory.
3. The dispenser inlet or pump inlet are not aligned, determine the distance necessary for the valve to be moved. To adjust the location lengthwise loosen the stabilizer bar. Vertical adjustment is available in the bracket plate by loosen the loosening 3/8" bolts. Align valve to dispenser inlet and retighten bolts.

## STEP 10 – Secure all connections and hardware

1. All connections should be secured to the specification of the manufacturer call out. A shear valve will not function properly if it is not secured to the stabilizer bar and bracket plate correctly.
2. When regularly schedule maintenance is performed this is a good time for a visual inspection inside the secondary containment plus a visual inspection of all connectors.



# WARRANTY

All Bravo products MUST be installed by a Bravo Certified contractor. Information contained in all Bravo literature is subject to change without notice. Bravo does not assume responsibility for liability for loss, damage or expenses resulting from installation, operation use or maintenance from this manual. By installing this product, you agree to S. Bravo Systems warranty terms.

## LIMITED WARRANTY

All containment systems sold by S. Bravo Systems, Inc. are warranted to be free from defects in material and workmanship for a period of one year from date of purchase. This warranty will be limited to the repair and replacement of Bravo parts only and will exclude all claims for labor or consequential damage. No other express warranties given and no affirmation of S. Bravo Systems, Inc. or its agents and/or representatives, by words or action, will constitute a warranty. It is expressly agreed that this warranty will be in lieu of all warranties of fitness and in lieu of the warranty of merchantability.

This warranty is void if there is any evidence of modification, abuse, negligence, or improper installation. If any fittings or components, other than S. Bravo systems approved fittings or components, are used in conjunction with any S. Bravo systems product, the warranty pertaining to these products is immediately void.

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