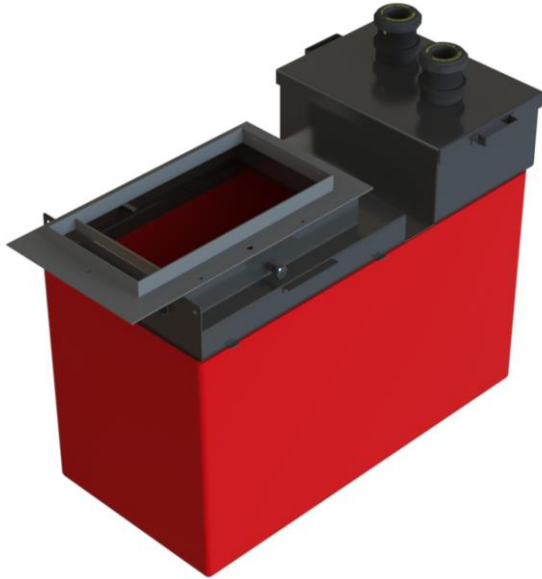


# Combination UDC Transition Sumps Singlewall A8000 And A9000 Series



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.



## Step By Step Installation

- Step 1 – Positioning and Leveling to Grade
  - Step 2 – Fitting Layout, Conduit Location and Preparation
  - Step 3 – Pipe Installation
  - Step 4 – Fitting Integrity Testing
  - Step 5 – Install Hardware
  - Step 6 – Backfill and Concrete
  - Step 7 – Racking System
  - Step 8 – Verify All Fasteners are Secured
  - Step 9 – Install Dispensers
  - Step 10 – Shear Valve Location and Adjustment
  - Step 11 – Secure Connections and Hardware
  - Step 12 – Piping and Conduit Installation
  - Step 13 – Upper Frame Installation
- Warranties and Disclaimers

Epoxy cure cycle. Full cure cycles vary depending on site conditions. Note that epoxy will not cure at temperatures below 40°F. See epoxy jar for more details.

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.

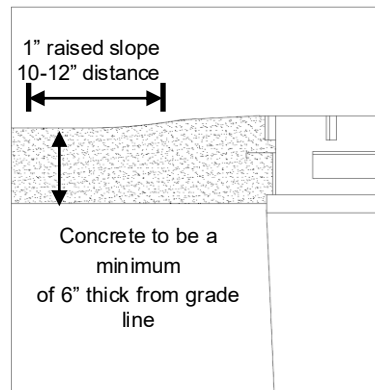
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# HOW TO INSTALL COMBINATION UDC TRANSITION SUMPS SERIES A8000 AND A9000 - SINGLEWALL

## STEP 1 – POSITIONING AND LEVELING TO GRADE

1. Set the transition sump on a wide bed of pea-gravel (at least 2" to 3"). This will support its weight and help prevent movement / shifting during installation of piping and other components.
2. The frame of the above ground should be a minimum  $\frac{1}{4}$ " above grade; shear point is set by the stabilizer bar and bracket plate when installed properly to the manufactured specification.
3. Secure the transition sump in place using the metal frame to assist.



Grade Data

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

1. Set the Shear point of the Shear valve assembly and bracket at top of concrete, measurements for the fitting location and riser length. Stay 1" from the edge of the UDC with the OD of your entry fitting will allow access 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.

## STEP 3 – PIPE INSTALLATION

1. Reference site plans to provide locations to install the fittings. Follow pipe manufacturers' instructions.
2. Always test the primary and secondary of your pipe before permanently bonding to the fiberglass sump.



When using and installing Bravo products, please consult local, state and federal regulations. **Installers of Bravo products must be Bravo-certified.**



# HOW TO INSTALL COMBINATION UDC TRANSITION SUMPS SERIES A8000 AND A9000 - SINGLEWALL

## **STEP 4 – Sump & Fitting Hydrostatic Integrity test**

1. Once pipe and fittings are installed perform a hydrostatic or EPA approved sump test.
2. Before hydrostatic testing, remove debris from interior of the sump; make sure the full cure cycle has occurred for all adhesives.
3. Visually check all fittings at the 6 o'clock position prior to testing; follow local regulations and state guidelines.
4. Fill with water to 4" above the highest penetration or side wall seam.
5. 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.

## **STEP 5 – INSTALL HARDWARE**

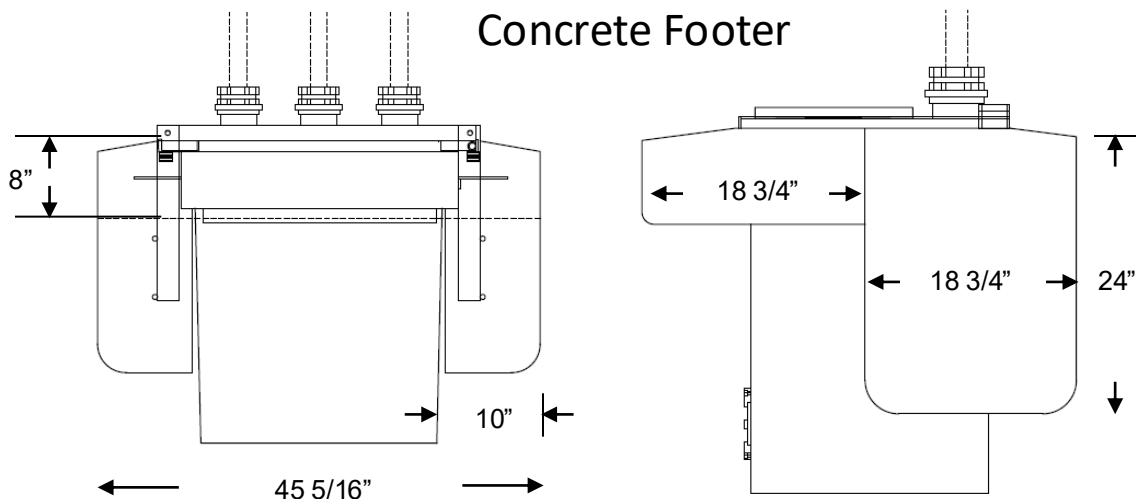
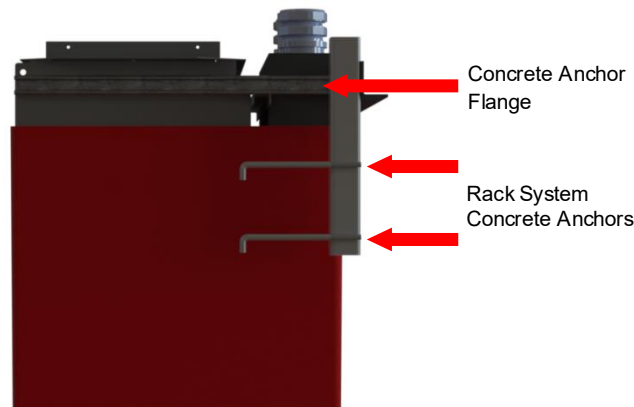
1. Install dispenser mounting hardware concrete anchor bolts to dispenser frame as shown in Figure 2.2. Bravo transition sumps are engineered to receive certain dispenser or pumps; if the selection process was accurate the hardware will align with the dispenser.



# HOW TO INSTALL COMBINATION UDC TRANSITION SUMPS SERIES A8000 AND A9000 - SINGLEWALL

## STEP 6 – BACKFILL AND CONCRETE

1. After verifying all sumps on site have passed the integrity test which is required by federal and local standards, begin back fill process; start the back fill process around equipment. Bravo sumps require a minimum of 2" of approved backfill around each sump.
2. If installing a rack system into the transition sump, note the concrete footer requirements in the sketch below. Dig out concrete footer area in backfill on each side of the A8000 or A9000. These footers are to handle the rack system load. The anchors are located at  $9\frac{3}{4}$ " and  $16\frac{3}{4}$ " on the side of the drop tube to mount the rack system.
3. The concrete foundation to support the rack system will be approximately 18" x 24" x 8" or what is specified by local building code.
4. After the concrete has set, remove square caps from rack sleeves, and assemble rack system. Drop rack into square tubing, or rack sleeves, then secure and seal off rack cross/brace and fasteners with urethane sealant.
5. The finish grade of concrete should direct water run off away from secondary containment equipment.

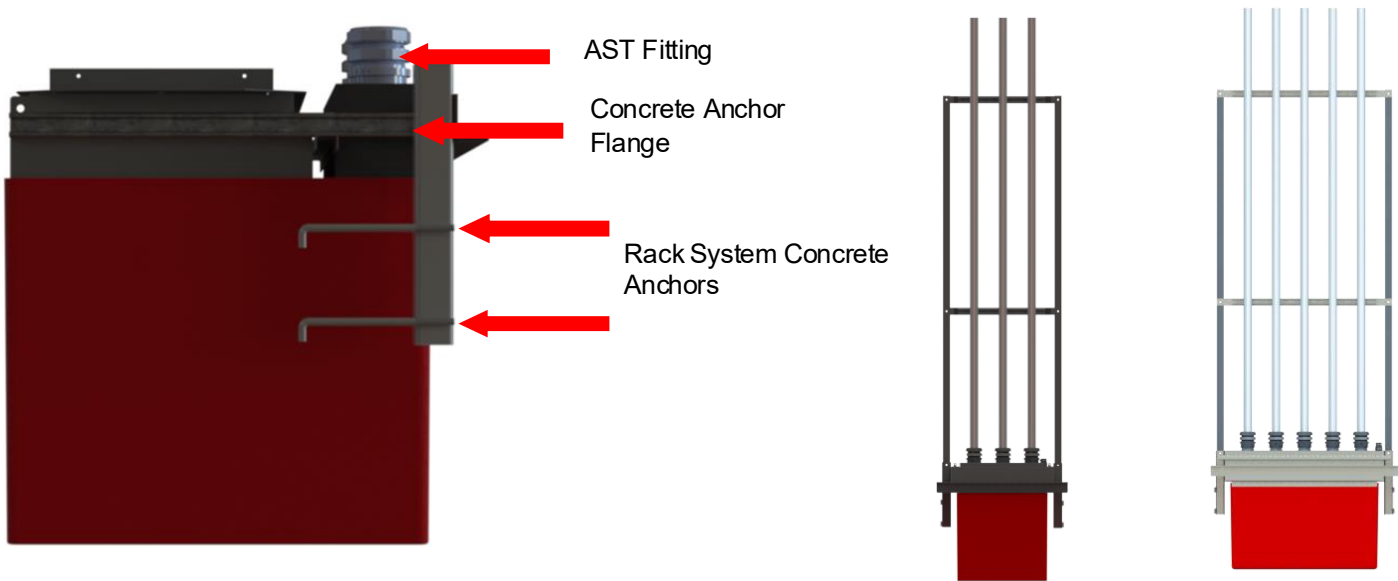




# HOW TO INSTALL COMBINATION UDC TRANSITION SUMPS SERIES A8000 AND A9000 - SINGLEWALL

## STEP 7 – RACKING SYSTEM

1. The Bravo rack system are the vertical supports and are a 2-piece unit. When setting the rack system ensure that all connecting points are securely tightened when the installation is complete.
2. The rack system is not installed until the concrete and finish concrete work is completed.
3. Use a urethane sealant around the top edges of the joint to deter water penetration.
4. Fasten to vent box. Install vertical riser pipe to appropriate height, according to local regulatory requirements. Secure pipes using pipe clamps to the rack system.





# HOW TO INSTALL COMBINATION UDC TRANSITION SUMPS SERIES A8000 AND A9000 - SINGLEWALL

## **STEP 8 – VERIFY ALL FASTENERS ARE SECURED**

1. Verify all fasteners are secure from the shear valve and bracket assembly.

## **STEP 9 – INSTALL DISPENSERS**

1. Place dispenser on to anchoring bolts in the transition sump, 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 10– SHEAR VALVE LOCATION AND ADJUSTMENT**

1. Install and anchor dispenser to transition sump and 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. If the dispenser inlet or pump inlet are not aligned, determine the distance necessary for the valve to be moved; adjust the location lengthwise, loosen the stabilizer bar; vertical adjustment is available in the bracket plate by loosening the 3/8" bolts; align valve to dispenser inlet and retighten bolts.

## **STEP 11 – SECURE 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 scheduled maintenance is performed, this is a good time for a visual inspection inside the secondary containment plus a visual inspection of all connectors.

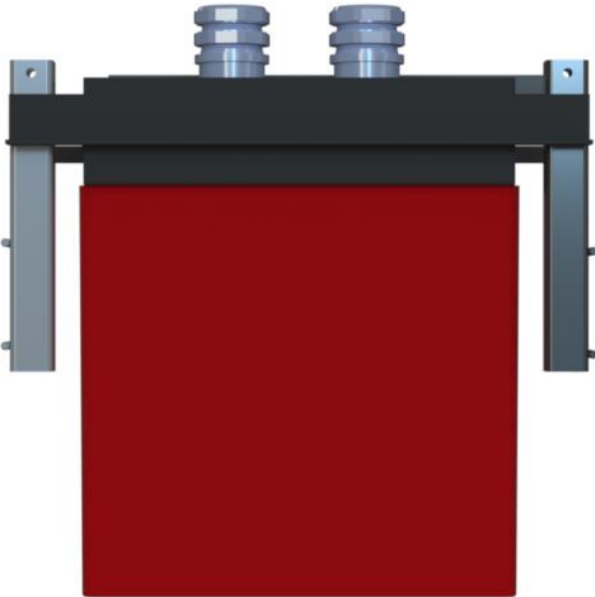


# HOW TO INSTALL COMBINATION UDC TRANSITION SUMPS SERIES A8000 AND A9000 - SINGLEWALL

## STEP 12 – PIPING AND CONDUIT INSTALLATION

### ABOVE GROUND PIPING APPLICATION

1. The above ground piping should follow the site plans and be secured per site specifications. If the Bravo rack system is being utilized it will be sized for the transition sump. RS-501 is used with B501 and RS-503 is used with B503.
2. Follow pipe manufacturers' installation Instructions to install the primary piping an/or vent lines. The long vertical pipes should not be installed until the sump has been secured in concrete.
3. The compression gaskets will need to slide over top of the vertical piping. Double check they are debris free and grease remains on the gasket to assist with ease of installation.
4. The compression nut needs to slide down the pipe similar to the compression gasket. The compression nut needs to be secured to the compression fitting and only secured to be hand tight. To torque down use the Bravo compression nut only take 1/4 to 1/2 turn beyond hand-tight. Do not over tighten the compression nut as it will crack with too much force.





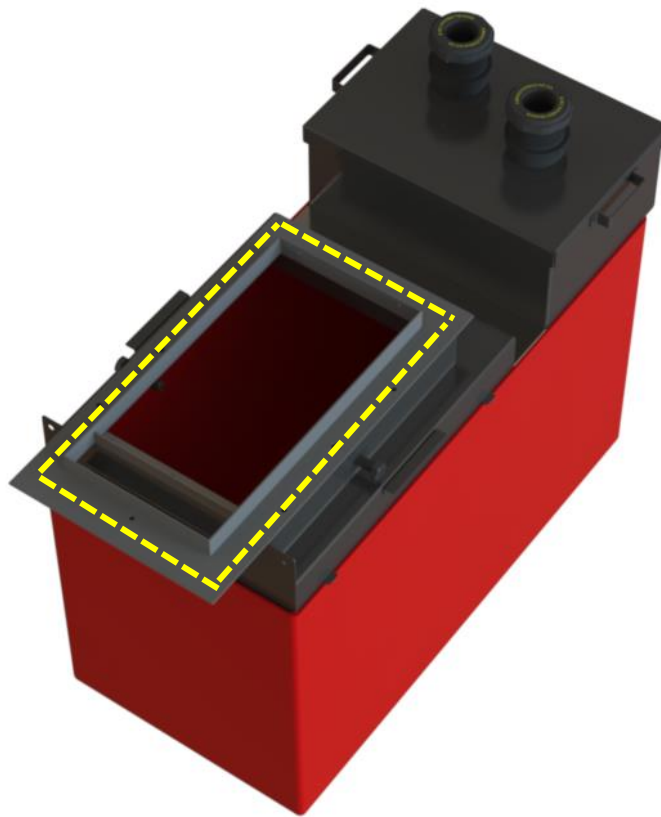
# HOW TO INSTALL COMBINATION UDC TRANSITION SUMPS SERIES A8000 AND A9000 - SINGLEWALL

## STEP 13 – UPPER FRAME INSTALLATION

1. Clean all surfaces. Apply a generous bead of provided urethane sealant to the top edge of the Midframe. Be sure to apply Vulkem to the bolt holes. (Fig.1)
2. Place the dispenser frame on top of the midframe and align the holes. Secure using provided truss head screws. Apply Vulkem to threads and between parts you are bolting to. Apply Vulkem to the external gap between the midframe and upper frame. After tightening bolts and/or nuts provided and upper frame is secure, apply generous amount of vulkem to seal the nut and threads.
3. Loosen valve bolts on bracket to allow for adjustability for when you align dispenser and make valve connections.



**Urethane  
Sealant**



**FIG. 1**



# 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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