



A1004EVR-317SS Series

5 Gal Double Wall Spill Containment

Stainless Steel Primary/Poly Secondary

IMPORTANT

Read these instructions completely before attempting to install this system. Failure to follow these instructions could result in damage to the manhole or tank and will void any warranty. Installation of the A1004 manhole on risers other than 4" NPT or use of equipment other than Emco Wheaton Retail could require modifications. Prior to any modifications or if you have any questions, please call Emco Wheaton Retail Customer Service at 800-234-4394.

INSTALLATION INSTRUCTIONS

Required Tools

- Tape measure
- 9/16" wrench, socket
- 3/4" socket
- Torque Wrench
- Emco Wheaton Z0838 Thread Sealant
- Emco Wheaton A0081-001 Adapter Wrench
- Emco Wheaton A0081-003M Install Wrench



Note: The spill container comes with a plastic protective rim cover to prevent concrete from entering the groove around the rim and to keep the rim clean from concrete. Do not discard the cover until after the concrete has set.

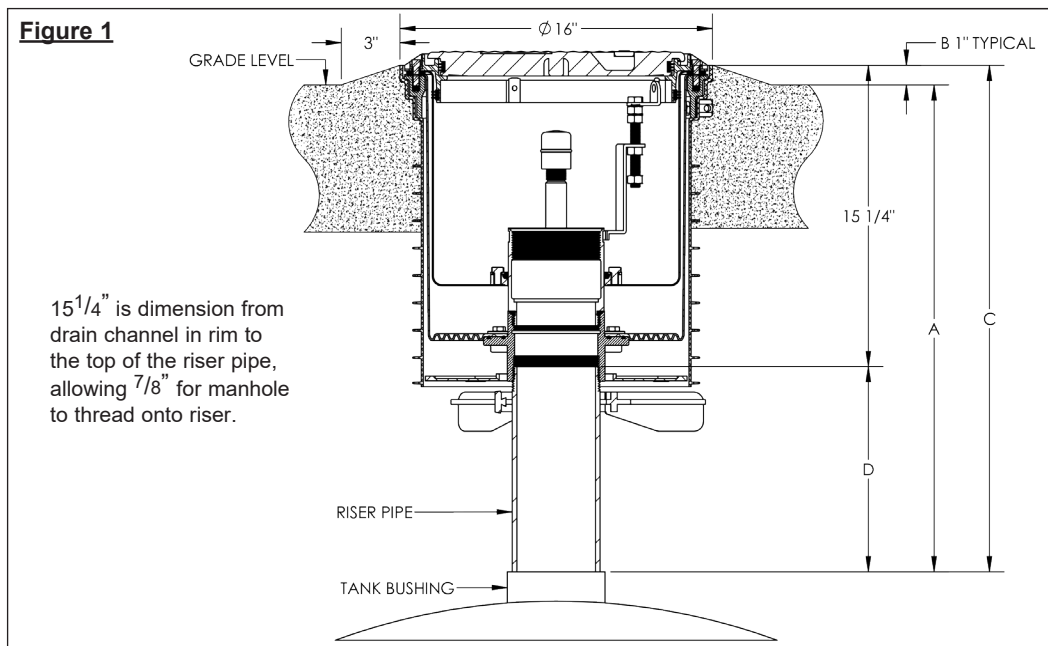
Step 1: Tank Riser Pipe Length (Figure 1)

1. Measure from top of tank bushing to grade = length A
2. Add crown height, length B to length A = length C
Note: Length B should be 1" minimum for proper run-off
3. Manhole height = $15\frac{1}{4}"$
4. Find riser length D. $D = C - 15\frac{1}{4}" + \frac{7}{8}"$ (to allow for threads into tank bushing)
5. Cut and finish riser pipe to length D. Thread riser pipe to 4.00 - 8 NPT requirements.
6. Tighten riser pipe/tank joint using a permanent thread sealant such as Emco Wheaton Z0838.

Example

1. A buried tank measures 36" from the top of the tank bushing to grade level. Length A is 36".
2. The site requires 1" crown height above grade to manhole rim for water run-off. Length B is 1".
3. $A + B = C$; $36" + 1" = 37"$
4. $C - 15\frac{1}{4}" + \frac{7}{8}" = D$; $37" - 15\frac{1}{4}" + \frac{7}{8}" = 22\frac{5}{8}"$
5. The 4" riser pipe should be $22\frac{5}{8}"$

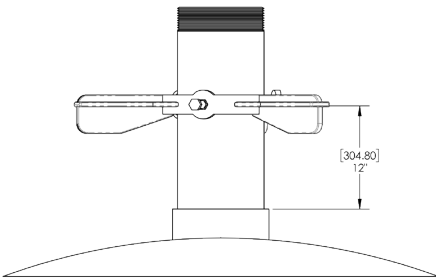
Note: Riser pipe must be within +/- 5/8" (22 - 23 1/4). If not within this range, either recut the riser pipe or add riser extensions to achieve this dimension. DO NOT OVER STRETCH BELLOWS.





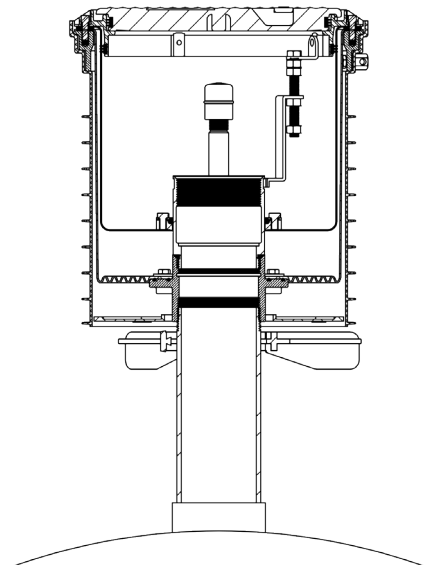
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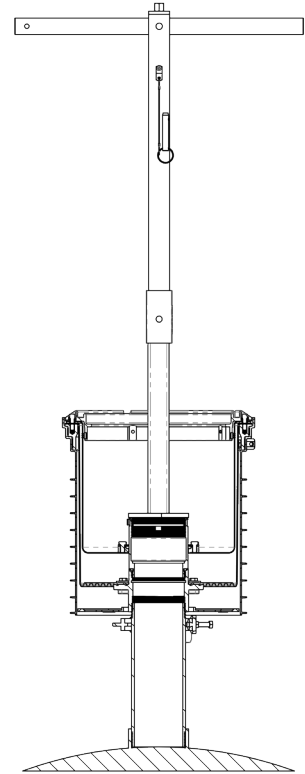
Step 2: Riser Lock to Riser

1. Emco Wheaton A0028 riser lock for tank riser pipe is included. Emco Wheaton recommends they be used to prevent the turning of riser pipe during future repair operations. If installing, use a 9/16" wrench to install the riser lock onto riser pipe approximately 12" from top of tank.



Step 3: Cap, Adapter, & Riser Seal

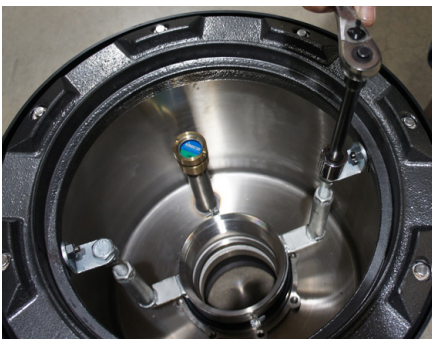
1. If cap, adapter, & riser seal are included, remove them and set aside.



Step 4: Install & Tighten Manhole

1. Screw the manhole to riser joint using a non-hardening, gasoline resistant pipe thread seal compound (such as Emco Z0838).
2. Use an Emco A0081-003M Installation Wrench and a torque wrench with 3/4" socket, torque to 100-150 ft./lbs.

Caution: Excessive tightening of the manhole may result in damage to the manhole which may cause leakage.



Step 5: Use jacks to adjust to grade level. Turn each screw an equal amount, alternating every two turns.



Step 5A: Turn clockwise to compress (lower the bucket) and counterclockwise to extend (raise the bucket).



Step 6: Push the o-ring (factory positioned on adapter flange), into the groove in bottom flange.



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Step 7: Install the 2 split flanges, using 7 of the 8 bolts.



Step 8: Use the eighth bolt to install the grounding clip. The grounding clip must touch the riser pipe. Hand tighten all eight bolts.



Step 9: Use a 9/16" socket to tighten the bolts to 15 ft. lbs. Note that the flange bolts must be tightened for the interstitial space to pass leak testing.

Step 10: Adapter

1. After installing OPV, install 494096 Riser Seal and A0030-124S Fill Adapter as per instructions.

If bucket application is for vapor, riser seal is not required. Install A0076-124S Vapor Adapter as per instructions.

2. Using the A0081-001 Adapter Wrench, and a torque wrench with 3/4" socket, torque to 35 ft./lbs.

Caution: **Do not** overtighten as this can damage the gasket. **Do not** use pipe sealant on adapter threads.

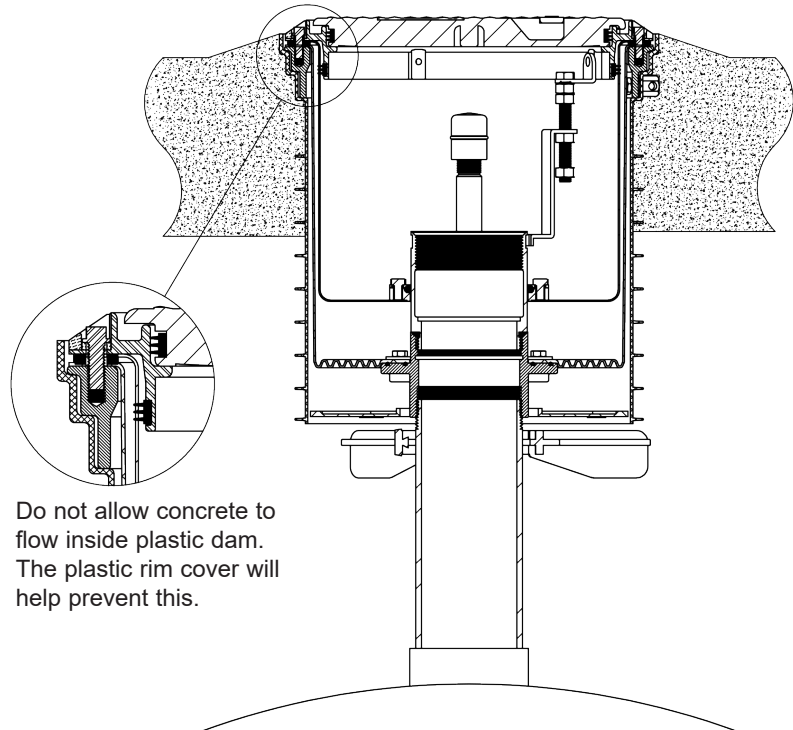
3. Install cap.

Step 11: Hydrostatic Test

Perform per local requirements.

Step 12: Secondary Integrity Test

See attached.



Step 13: Backfill and Finish

1. Finish back filling over tank and around manhole to depth required for concrete pad.

2. Concrete must completely fill around and under manhole rim to insure proper anchoring. Be sure to allow a 1" crown above grade to manhole rim for water runoff.

3. After concrete has set, remove and discard the plastic rim cover. Remove excess concrete, if any, from inside of rim and the runoff channels.

4. Remove jack assembly.



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Secondary Integrity Test

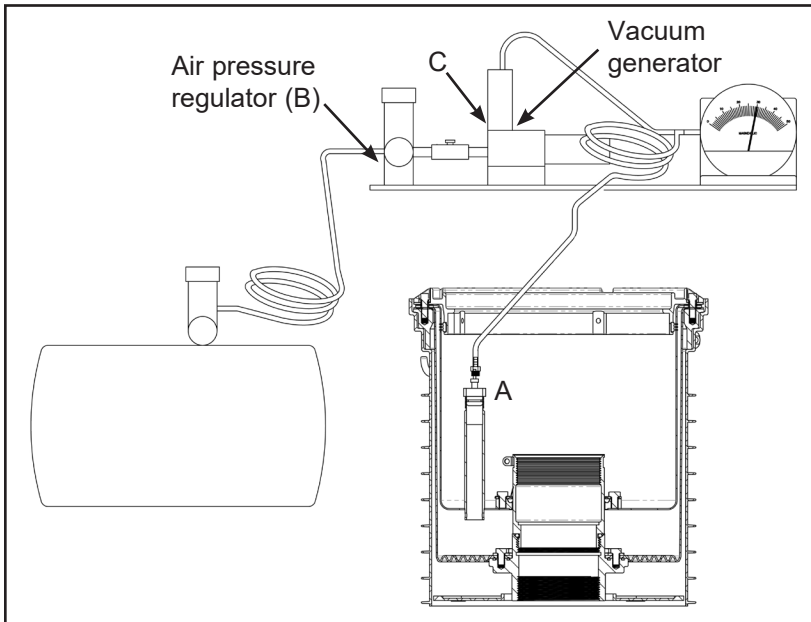
Emco Wheaton Retail A1004EVR-317SS Double Wall Spill Containments are vacuum tested, both primary and secondary, prior to shipment. To ensure that no damage has incurred during shipment or installation, the following test is a quick, on-site method to verify the integrity of the primary and secondary containments.

Equipment

Vacuum apparatus w/test adapter 494343, available from Emco Wheaton Retail, p/n A1004-210TEST
Timer
Air supply, 30 psi

Procedure

1. Remove the gauge from the inspection port and install the test adapter p/n 494343 (A, included with the vacuum apparatus).
2. Attach air pressure source to air pressure regulator (B) on vacuum apparatus.
3. Slowly apply vacuum of 30" water column (2.2" mercury) to the interstitial space, by moving the toggle switch (C). Wait 30 seconds. Reapply 30" water column.
4. Ensure switch is in off (center) position, start timer and record remaining vacuum after 1 minute.
5. If the remaining vacuum after 1 minute is 26" water column (1.9" mercury) or greater, both the primary and the secondary containment vessels are tight.
6. If the test fails, allow the bellows to equalize for one minute and repeat test, starting at step 3.
7. If test fails a second time, refer to Emco Wheaton Retail Test Procedures TP-160 and TP-161.
8. Replace components or repair as necessary.



Preventive Maintenance

1. Keep rim/lid and drain areas free of debris.
2. Replace any damaged part at once.

Replacement Items

495067K	Vent Valve Replacement Kit
495625	O-ring, brass EZ-Gage
495996	O-ring, aluminum EZ-Gage
570012	Triple Wiper Seal
A1004-210TEST	Vacuum Test Apparatus
A1004-001GAGE	Interstitial Gauge
A1004-316LID	Lid and Seal Composite
A1004-316CLID	Lid and Seal Cast Iron



494343 Test Adapter

Tank Operator Responsibilities

Tank operator must ensure that all Federal, Provincial and local codes are being met during the filling of the tank. All operators must be familiar with proper filling procedures. The operator responsible for transferring product to an above ground storage tank must take all reasonable steps to prevent spillage. The delivery hose from the tank's fill pipe must not be disconnected before the hose has been drained completely. When tank vehicles are being unloaded, the vehicle operators must remain (a) in constant view of the transfer nozzle and fill pipe; and (b) in constant attendance at the discharge control valve.

Emco Wheaton Retail

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