



85000-1 Series Spill Containers – Fill and Vapor

Installation Instructions

Introduction

Phil-Tite Spill Containers (Fill and Vapor) are designed to provide easy installation and/or removal of the spill container without the need for timely excavation, cutting concrete or disassembly of secondary containment covers. Phil-Tite's drain valves drain directly into the tank, providing a fast and complete removal of excess liquid spilled during a product delivery operation while maintaining a reliable seal that is vapor and liquid tight, eliminating leaks into the environment. All Phil-Tite's Spill Containers have straight machined threads (female threads where the spill container screws onto the riser adaptor.) All Spill Containers are shipped completely assembled and CARB Phase I EVR Tested and Certified. No field assembly is required. The new 85000-1 Series Spill Container can be used as a direct replacement for a correctly installed 85000 series EVR Spill Container without cutting concrete or changing the tank riser. *Note: On EVR certified systems the drop tube is installed under the fill spill container.*

INSTALLATION:

For New UST Installation and/or UST's being Upgraded

Step 1 – Determining The Correct Riser Length for Spill Container Installation

1. Method 1 - Cut and thread your steel tank riser to allow approximately **18 1/8"** (Fill riser), and/or **18"** (Vapor riser) from top of the tank riser to finish grade. This measurement assumes an M/F 4X4 Riser Adaptor will be installed. Also this measurement will allow the water tight cast iron lid to seat properly into the stainless steel sleeve when the spill container is installed. See Figure 1.
2. Method 2 - With the M/F 4X4 Riser Adaptor installed onto the Tank Riser you should have **16 3/8"** (Fill), and **16 1/4"** (Vapor) measured from the top of the M/F 4X4 riser adapt and/or to finish grade and/or top of the diamond plate manway cover. This measurement will allow the water tight cast iron lid to seat properly into the stainless steel sleeve. See Figure 1.
3. Method 3 - Using a tape measurer, measure from top of the tank to finish grade and/or top of the manway cover. This is measurement "A". For 85000-1 Fill Spill Container subtract 18 1/8" from measurement "A" to equal XXX". $"A" - 18 \frac{1}{8}" = xxx"$. For the 85000-1 vapor spill container subtract 18" from "A". The results are the length of your risers measured from the top of the tank. Cut and thread one end of your 4" riser and dry fit it into the tank bung. Measure your riser (installed into the tank bung) from top of tank to the dimension above, mark your riser. Cut this riser on the mark made above and thread this end. See Figure 1.

Step 2 – Dry Fit All Components

- A. Dry fit your tank riser to verify your measurements. After you have dry fitted all components and are satisfied with your measurements, apply an approved fuel resistant, non hardening thread sealant (pipe dope) to the NPT threads on both ends of the tank risers.

Step 3 – Install Tank Risers

- A. Install and torque the tank risers into the tank bungs.

For Replacing Existing Phil-Tite 85000 series Spill Containers with 85000-1 series Spill Containers

Step 1 - Determining The Correct Tank Riser length for Spill Container Installation

- A. Existing tank risers with NO M/F 4X4 riser adaptor installed. – Using a tape measure, measure from the top of your riser to finish grade and/or top of the manway cover. Record this measurement. For Fill spill containers this measurement should be **18-1/8"** from the top of the riser to finish grade. For Vapor Spill Containers this measurement should be **18"** from top of riser to finish grade. If these measurements are less than the above measurements you must shorten your riser to meet these measurements. These measurements allow for an M/F 4X4 Riser Adaptor to be installed on top of the tank riser before the spill container is installed. If you are not installing an M/F 4X4, add **1-3/4"** to your riser length.

*Remember, from finish grade to the top of the M/F 4X4 adaptor installed on the riser should be **16-3/8"** for Fill spill containers. See Figure 1.*

- B. Existing tank risers with M/F 4X4 riser adaptor installed – Using a tape measurer, measure from the top of the M/F 4X4 riser adaptor to finish grade and/or to the top of the stainless steel sleeve. Record this measurement. For Fill Spill Containers this measure must be greater than or equal to **16-3/8" (16 3/8" – 20 1/8")**, and for Vapor Spill Containers this measurement must be greater than or equal to **16 1/4" (16 1/4" – 20")**.
- C. If your existing riser is to long, there are several possible ways you can shorten them. Some possible methods are:
- 1) Remove the nipple that would have been installed prior to 2001 under the pre-EVR Installation Instructions and install a shorter nipple. Especially helpful for direct buried spill containers.
 - 2) For multi-port systems, remove the existing riser(s) and install the correct length riser(s). Use an M-1600 riser support bracket to maintain alignment 16" on center between the fill and vapor riser.
 - 3) For direct buried risers with no nipple and coupler you maybe able to excavate down to tank top using a 10" to 11" OD PVC pipe placed over the 4" riser. Then remove the backfill material as you lower the pipe down over the riser. When you have reached tank top remove the 4" riser and install the correct length 4" riser per following Steps 2 & 3. After you have installed the tank riser gradually remove the 10" – 11" OD PVC pipe as you back fill the space between the 4" riser and the 10 – 11" OD PVC pipe.

Step 2 - Dry fit your riser to verify your measurements.

- A. After you have dry fitted all components and are satisfied with your measurements, apply an approved fuel resistant, non hardening thread sealant (pipe dope) to the NPT threads on both ends of the tank risers.

Step 3 - Install the correct length tank risers

- A. Install and torque the 4" tank risers into the tank bungs.

85000-1 Series Spill Container Installation

Step 1 – Preparing the Black Spill Container for Installation

- A. Inspect the black spill containers ensuring that the ¼" flat seal is in place and properly oriented for sealing onto the flared top of the drop tube (Fill) or on the M/F 4X4 Riser Adaptor (vapor). On Fill spill containers ensure the drop tube has the special Phil-Tite "O" Ring (85039-DT) installed under the upper drop tube flare and is seated on top of and inside the M/F 4X4 riser adaptor installed on top of the tank riser. If you are using a straight drop tube from a different manufacturer, discard the "O" Ring that may have been shipped with this drop tube and use the special Phil-Tite "O" Ring (85039-DT) that is shipped with each Fill Spill Containers.
- B. 85000-1 Fill Only. Inspect the foam filter located inside the container. The filter should be lying flat and secured by the stainless steel snap ring. Move the drain valve handle back and forth making sure that the lower screen assembly rises (compresses) when moved to the open position and extends when closed. The drain valve handle should move freely with no binding and must snap into place when moved to the closed position.
- C. **ALL SPILL CONTAINERS - NOTE: DO NOT USE ANY TYPE OF THREAD SEALING COMPOUND (PIPE DOPE) FOR SPILL CONTAINERS INSTALLATION! Apply an even coat of Anti-seize compound to the black spill container female threads and/or to the M/F 4X4 riser adaptor male threads or apply a light Silicon based spray.** This will reduce the friction between these threads during installation and aid in removal of the spill containers at a later date.

Phil-Tite Spill Containers create an optimum, leak free seal when properly tightened (torque) to the M/F 4X4 riser adaptor.

When installing the black spill containers in a direct bury application apply an even coat of Silicon based spray to the large outer "O" Ring seal of the black spill container and to the inside of the stainless steel sleeve to ease insertion.

Note: For multi-port installations - Apply an even coat of Silicon based spray to the large outer "O" Ring seal of the black spill containers(s) and to the inside of the stainless steel sleeve(s) just prior to installing the manway cover with stainless steel sleeves. This will aid in installing the manway cover over the installed spill containers.

Step 2 - Installing the Black Spill Container onto the M/F 4X4 Riser Adaptor

- A. By hand, thread the black spill container onto the male threads of the M/F 4X4 riser adaptor taking care not to cross thread the spill container riser. These threads are straight threads not NPT pipe threads. The spill container must screw down and seat on the top of the drop tube flare (Fill) or on the top of the M/F 4X4 riser adaptor sealing surface (Vapor).

Step 3 – Tightening the Spill Container

Using a ½” drive torque wrench and the Black tool adapter (T-7101 or T-7002, Black) from Phil-Tite T-7043 Tool Kit, tighten the Spill Container onto the M/F 4X4 Riser Adaptor threads to a torque value between **75 and 100 ft. lbs.**

Step 4 – Final Installation

Check the measurement from the top of the black spill container to the top of the stainless steel sleeve at finish grade. Ensure there is at least **1 1/4”** inches of clearance (more is OK) from the top of the black spill container to the top of the stainless steel sleeve at finish grade. This will allow for the water tight cast iron lid to fit properly and ensure that the spill container and tank riser are not in direct contact with the cast iron lid. This ensures the concrete with manway cover are not load bearing onto the tank fill and vapor risers.

Step 5 – Drain Valve Testing

Test the drain valve assembly as described in CARB procedure TP-201.1D.

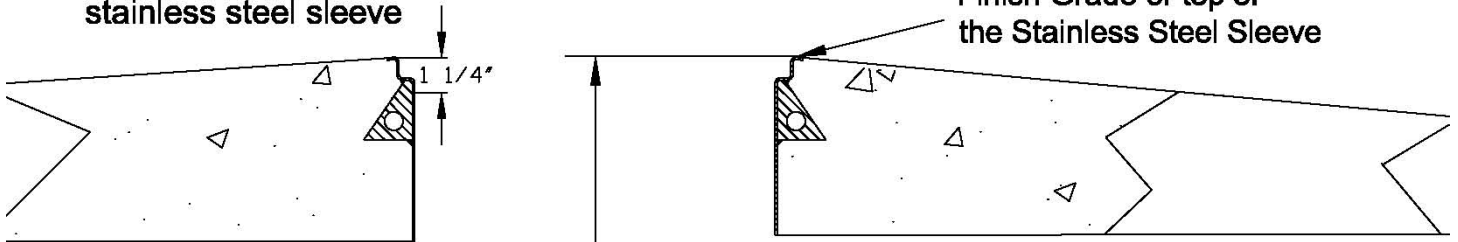
Step 6 – After Spill Container Installation

The spill container is now ready for the installation of the rotatable (swivel) adaptor and dust cap. Install the fill and/or vapor swivel adaptor using the SWF-100B/SWV-101B Installation Instructions.

Figure 1

85000-1 EVR SPILL CONTAINER INSTALLATION GUIDE

For the Cast Iron Lid to seat properly the Black Spill Container must be a min. of 1 1/4" below the top of the stainless steel sleeve



Allow Approximately 16 3/8" From the Top of The Riser Adaptor (M/F 4X4) To Finish Grade

Or allow 18 1/8" from top of tank riser to finish grade. This deminsion will allow for the M/F 4X4 Riser Adaptor and 85000-1 Spill Container to be correctly installed.

M/F 4X4 Riser Adaptor

4" Steel Tank Riser

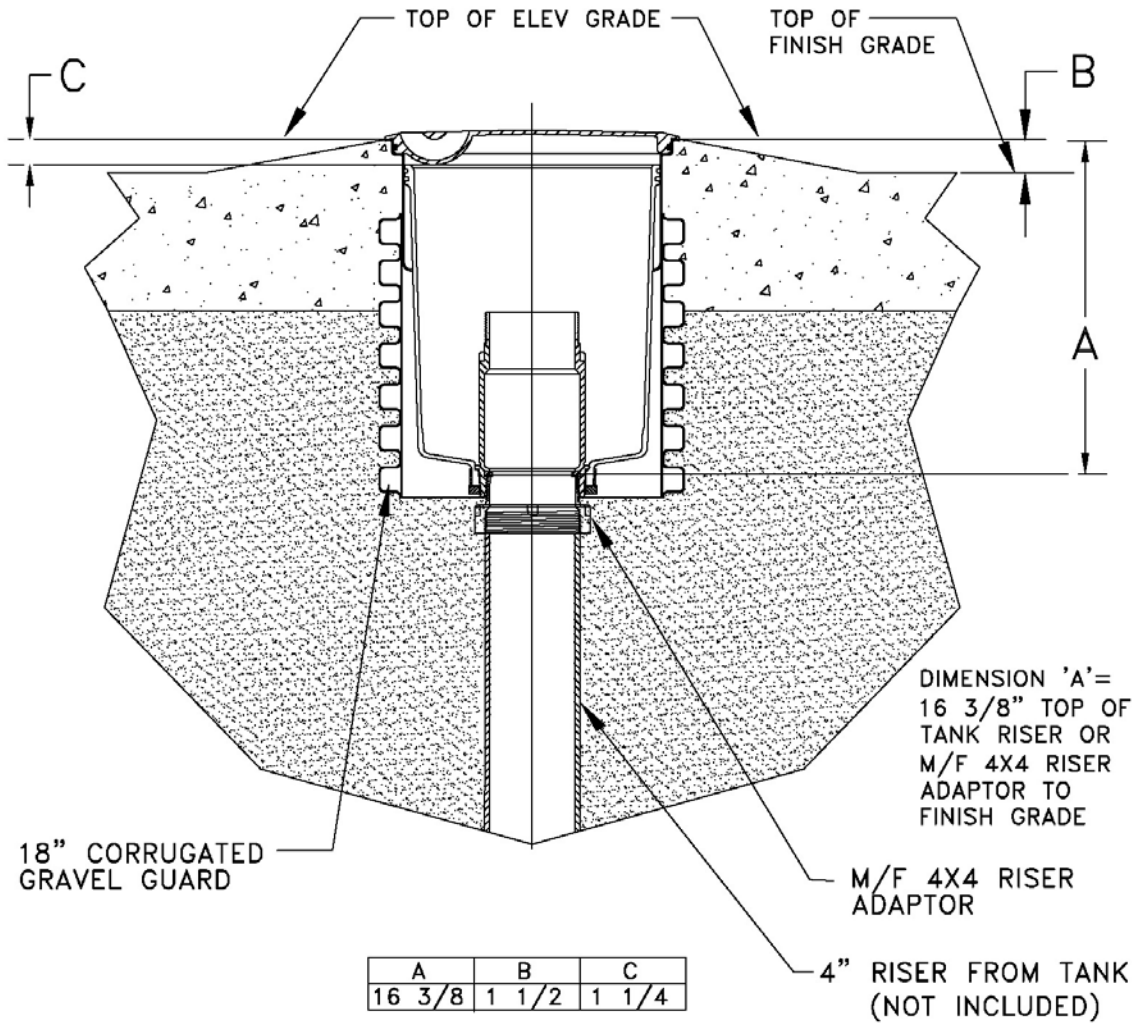
To Compensate for the installed height of the M/F 4X4 Riser Adaptor, reduce the length of the tank riser by 1 3/4".

TOP of STORAGE TANK

Bottom of storage tank

Figure 2 (Direct Bury)

5 GALLON SPILL CONTAINER



NOTES:

- 1- FOR VAPOR TIGHT INSTALLATION AND EVR APPLICATIONS USE AN M/F 4X4 RISER ADAPTOR ON ALL TANK RISERS (REDUCE THE LENGTH OF THE TANK RISER BY 1 3/4")
- 2- ALL DIMENSIONS SHOWN ARE SUGGESTED BY THE MANUFACTURER AND ARE APPROXIMATE. ACTUAL INSTALLATION CONDITIONS MAY VARY.

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PHIL-TITE
Franklin Fueling Systems

3760 Marsh Road
Madison, WI 53718, U.S.A.
Tel: +1 608 838 8786
Tel: USA & Canada 1 800 225 9787
Tel: Mexico 001 800 738 7610
www.franklinfueling.com