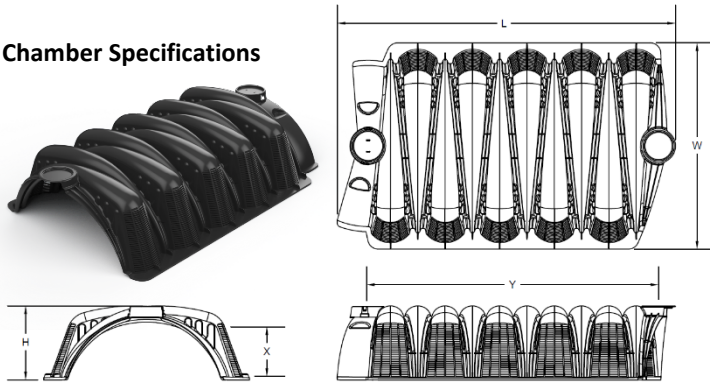


Overview

PrinSCO Pro4 Chambers are a highly efficient, gravelless drainfield solution for residential and commercial septic systems. They were specifically designed for professional contractors who are looking for cost efficiency, delivery convenience, ease of installation, and application flexibility while maximizing drainfield infiltration area.

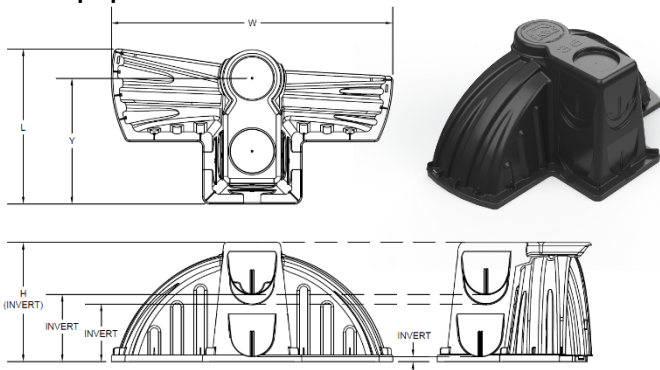
Pro4 chambers are designed to exceed the requirements of the International Association of Plumbing and Mechanical Officials (IAPMO) standards. The Pro4's unique, asymmetrical arches provide maximum structural performance to meet the demands of today's drainfield installations. Their interlocking coupler allows for 10° of joint articulation in either direction for contoured trench or bed applications.

Chamber Specifications



Pro4 Chamber Specifications			
Chamber	Pro4 24	Pro4 36	Pro4 36 HC
Dimensions (L x W x H)	TBD	56" x 34" x 12"	TBD
Effective Length (Y)	TBD	48"	TBD
Chamber Storage	TBD	51 gal	TBD
Sidewall Height (X)	TBD	8.5"	TBD
Open Bottom Area	TBD	9.8 ft ²	TBD
Weight	TBD	14.5 lbs	TBD

End Cap Specifications



Pro4 End Cap Specifications			
End Cap	Pro4 24	Pro4 36	Pro4 36 HC
Dimensions (L x W x H)	TBD	16" x 29" x 12"	TBD
Effective Length (Y)	TBD	13"	TBD
Invert Elevations	TBD	0.5", 6", 7", 12"	TBD
End Cap Storage	TBD	7 gal	TBD
Weight	TBD	2.6 lbs	TBD

Gravity Trench Installation

Before you begin the installation, read these instructions and any documents referenced in it. Pro4 chambers may only be installed per State and/or local regulations and, like all drainfields, must have prior site and soil conditions approved. Contact your local health department if the chamber installation requirements need clarification.

Required materials and tools:

- Pro4 Chambers and End Caps
- PVC pipe and couplings
- Excavating equipment
- Leveling equipment
- Shovel and rake
- Measuring device
- Cordless drill, drill-bits, and hole-saw

Site Preparation

Do not install the system when there are wet soil conditions. Install erosion control prior to installation if necessary to protect the site.

Step 1: Establish the location of the system components, including trenches and mark out accordingly. Set the elevations for the system components and chamber system according to plan and per state and local codes. Refer to the Vehicle Loading section for specified cover requirements. Follow minimum trench spacing per state and local codes.

Step 2: Trenches should be level. Trench widths should be per the following trench width chart.

Minimum Trench Width Requirements	
Pro4 24	24"
Pro4 36	36"
Pro4 36HC	36"

For jurisdictions requiring sloped trenches, measure and verify necessary trench bottom slope.

Step 3: Clear any debris within the trench and hand rake the trench bottom. If any bottom or sidewall smearing has occurred, scarify those surfaces.

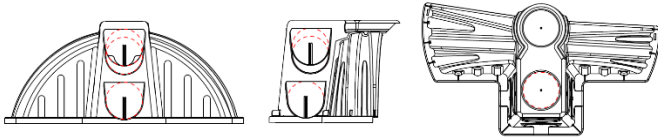
Step 4: Perform a final elevation check on each trench and system components before installing chambers.

Preparing the Pro4 End Caps

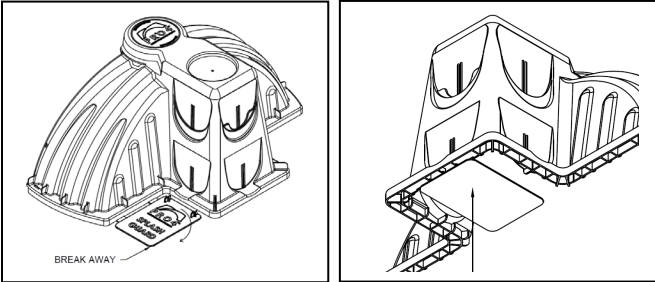
Use the appropriate Pro4 End Cap Model per Pro4 Chamber Size, see End Cap Specifications.

Step 1: Drill an opening in the end cap with a hole saw where the inlet pipe will be inserted. Select the drill point based upon the invert elevation and hole size. Pro4 End Caps can accommodate up to 4" Schedule 40 and SDR-35 pipe.

Pro4 End Cap Inlet Drill Locations



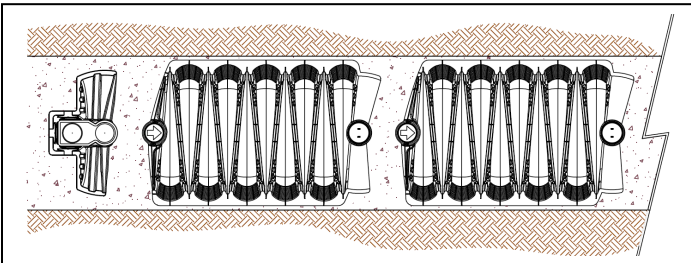
Step 2: Install the splash guard by removing the guard from the end cap and inserting the risers of the guard into the channels underneath the end cap footer.



Installing the System / Chamber Assembly

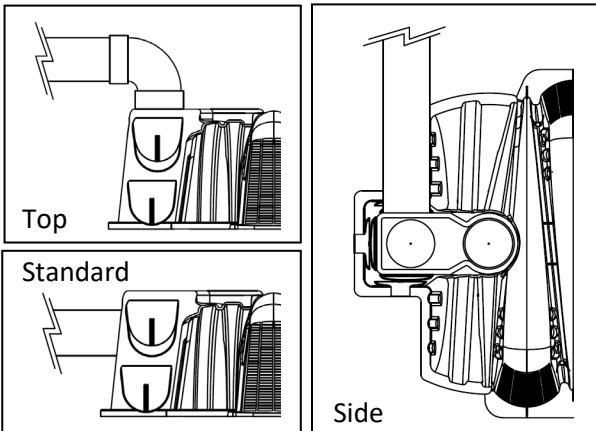
Step 1: Check the elevation of the invert and make sure it is aligned with the header pipe.

Step 2: Position the first chamber within the start of the trench. The end of the chamber marked **INLET** begins the row and should be facing the header pipe, the arrow should be pointing toward the end of the lateral.



Step 3: Place the prepared end cap over the chamber and make sure it is aligned with the header pipe. The end cap will snap into place with locking tabs when pressed down on the chamber.

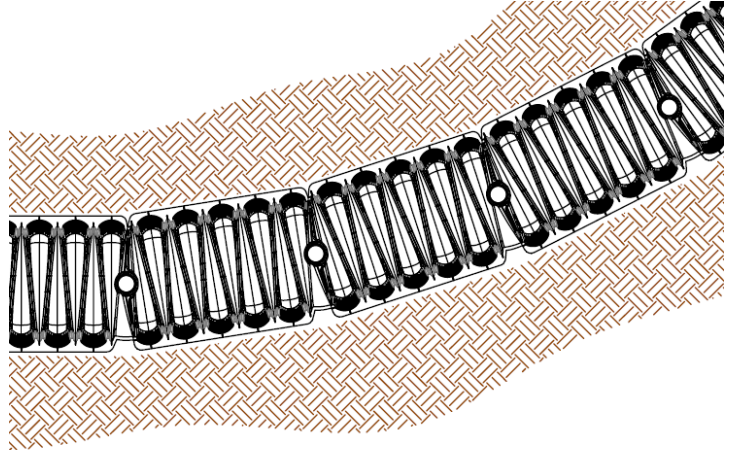
Inlet Options



Step 4: Insert the inlet pipe into the prepared end cap opening. The pipe should be inserted at least 2”.

Step 5: With another chamber, place the coupler end marked **INLET** over the previously placed chamber. The chamber-to-chamber coupler has a positive locking feature designed to keep the chambers secure during backfill.

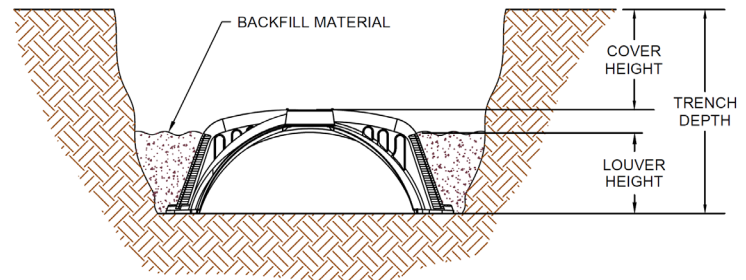
Step 6: For installation following contours, rotate the chambers to align with the trench contour. Pro4 chambers joints can rotate a maximum of 10° in both directions.



Step 7: Continue installing the chambers until the lateral is complete.

Step 8: Install an end cap on the last chamber in the trench.

Step 9: Once all the chambers and end caps are installed in the trench lateral, begin backfilling with soil around the sides of the chamber and around the end caps by hand. Fill soil just above the top of the sidewall louvers. Remove any large rocks that meet the sidewalls.



Step 10: Compact this soil by walking along the sides of each chamber.

Note: Walking in the soil is an important step that will keep the chambers from shifting during final backfill and provide the necessary support when covering the system.

Step 11: Follow this process for each trench.

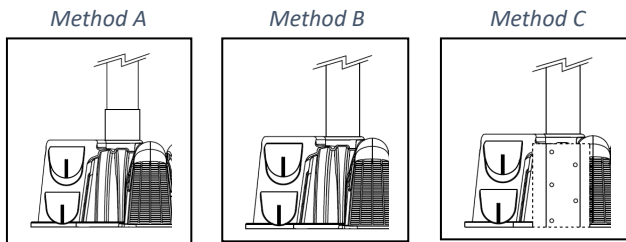
Installing the Optional Inspection Port

Pro4 Chambers are designed to accommodate an optional inspection port at the beginning and end of trench laterals and mid-line at 4-foot intervals.

Step 1: On the marked area on the chamber or end cap, use a hole saw to drill for the inspection port pipe. The top cut-out sections can accommodate up to 4" Schedule 40 pipe.

Step 2: Insert the section of pipe into the cutout port based on the desired method:

- Method A: Pipe extends down a few inches, supported by a pipe coupler.*
- Method B: Pipe rests on the lip of the chamber.*
- Method C: Pipe extends down to trench bottom with multiple holes at various elevation.*



Step 3: Secure the pipe using a screw through the coupler/end cap ring.

Step 4: Fasten either a threaded clean out cap or non-threaded cap to the end of the inspection pipe at the specified length to allow access after covering the system

Covering the Pro4 Chamber System

State and local codes require that chamber systems be inspected and approved prior to backfilling by a health official or other official with jurisdiction.

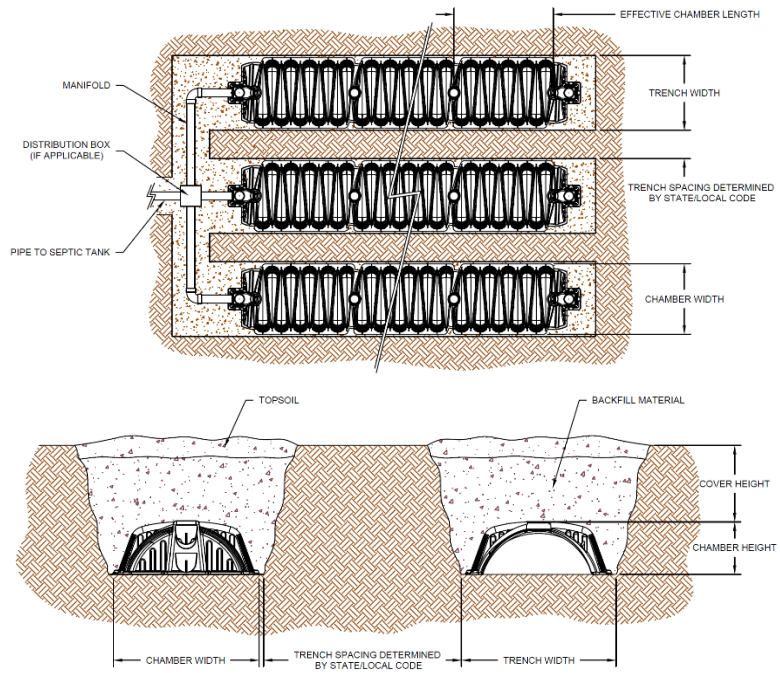
Step 1: Begin by backfilling the trenches with soil using a track-hoe or back-hoe. Remove any large rocks from the soil before backfilling.

Note: *A minimum 6" of cover is required for non-traffic application. A minimum of 12" of compacted cover is required before a vehicle can drive over the chamber system. Refer to Vehicle Loading for requirements. Pro4 chamber trench applications allow for a maximum of 8' of cover.*

Step 2: It is recommended to allow for soil settling by adding 3-4 additional inches of soil cover. This additional soil will also help protect against potential erosion.

Step 3: To prevent further erosion, cover the system with seed or sod.

Step 4: For new construction, it is recommended to mark the area around the system to prevent construction vehicles from unknowingly driving over the system.



Vehicle Loading

When operating a vehicle near a chamber drain field system, avoid driving directly over the top of the chamber. Pro4 Chambers require a minimum of 12" of compacted cover over the top of chambers to support AASHTO H-10 loading. This loading is equivalent to 16,000 lbs. axle weight. For shallow cover applications installed with 6" of compacted backfill, chambers can support tracked vehicles that are less than 10,000 lbs. gross vehicle weight. When backfilling and driving over a chamber system, do not travel parallel over the length of the chamber rows, but rather perpendicular. Additional soil compaction may occur if heavy equipment is operated over a system. Do not drive over the system when backfilling with sand.

For bed and pressure dosing applications see: *Pro4 Bed Installation Instructions & Pro4 Pressure Distribution Installation Instructions.*

For alternate inletting, mid-line inletting, severe contours, and trench looping see: *Pro4 Alternate Inletting, Mid-line Inletting, Severe Contour, and Trench Looping Details.*

Prinsco's Pro4 Limited Warranty is available at www.Prinsco.com or call (320) 222-6800.

For questions and technical support: Please contact Prinsco Technical Services at (320) 222-6800 or visit us at www.Prinsco.com.