

POST or WALL MOUNTED WATER DIVERTER KIT

Calculating the amount of water to divert

Industry experience and field testing suggests the amount of water diverted should be determined based on (1) the **surface area** of the roof, and (2) the **amount of pollutants** on the roof. The following factors can be used as a guide in determining the volume of water to be diverted.

POLLUTION FACTOR FOR THE ROOF

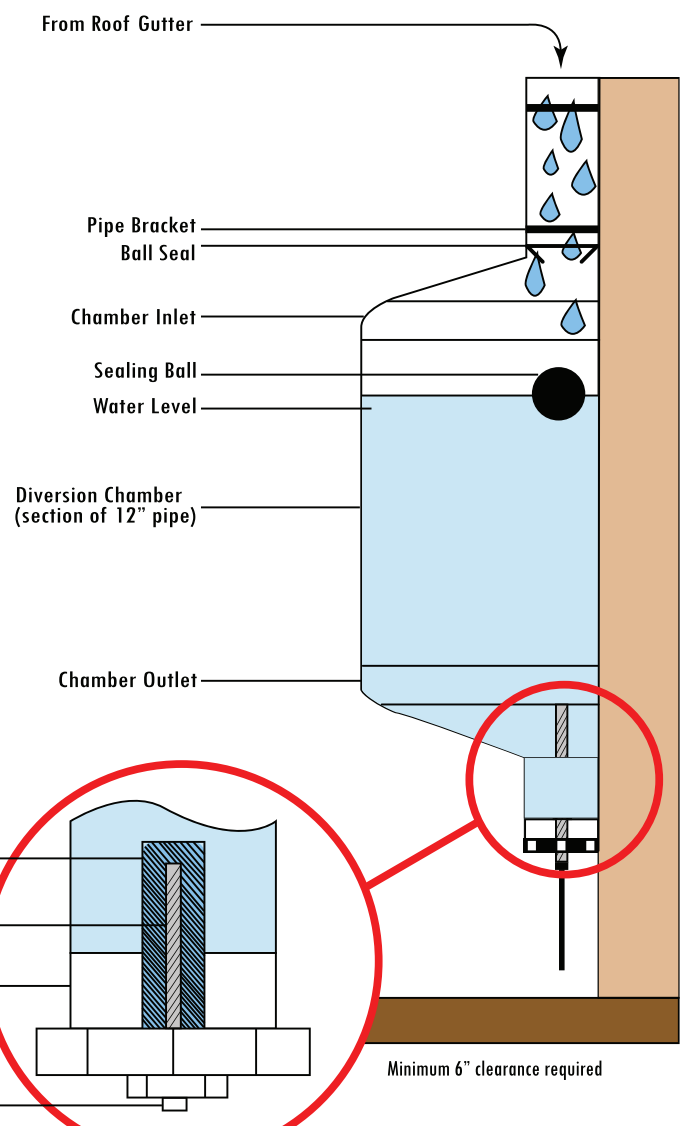
Minimal Pollution - divert 0.0125 gallons/ft²
Open field, no trees, no bird droppings, clean environment
Substantial Pollution - divert 0.05 gallon/ft²
Leaves and debris, bird droppings, various animal matter,
e.g. dead insects, lizards, etc

DIVERSION FACTOR FOR A FIRST FLUSH WATER DIVERTER

Roof Area (ft²) X Pollution Factor = Rainwater to be diverted

Example for a minimal polluted roof of 1000ft²
1000 X 0.0125 = 12.5 gallons to be diverted

Example for a heavily polluted roof of 1000ft²
1000 X 0.05 = 50 gallons to be diverted

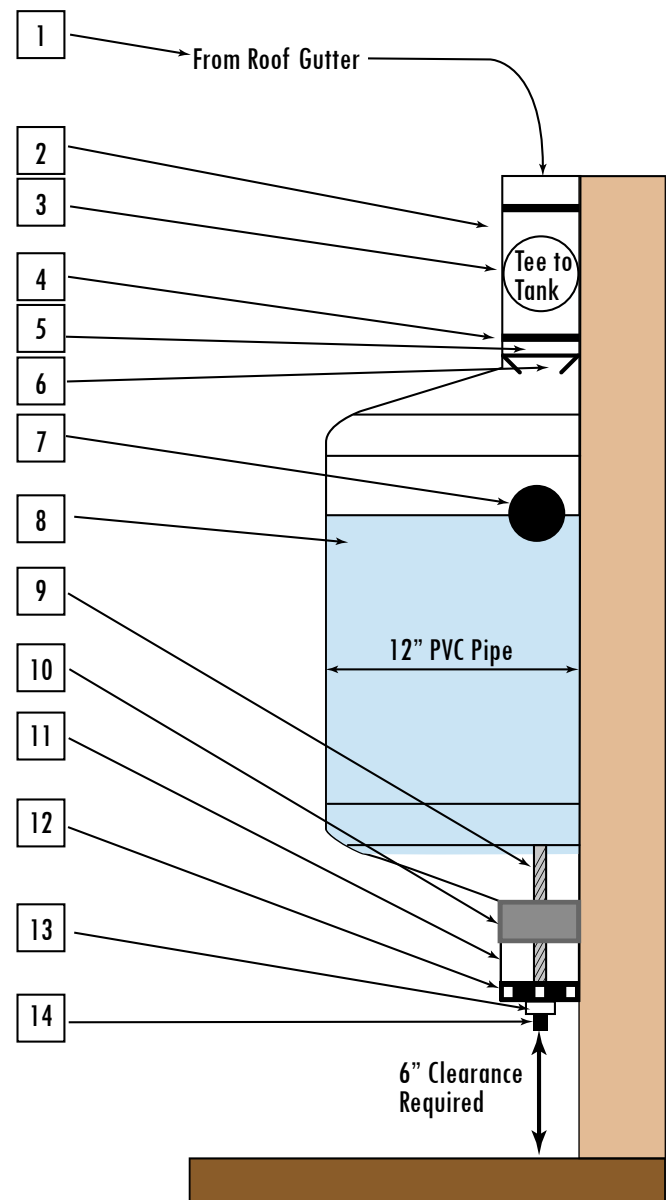


POST - WALL

PIPE LENGTH CALCULATIONS

SIZES	PIPE	TOTAL
US GALLONS	LENGTH (inches)	TOTAL HEIGHT REQUIRED (inches)
6	12	26
9	18	32
12	24	38
15	30	44
18	36	50
21	42	56
23	48	62
26	54	68
29	60	74
32	66	80
35	72	86
38	78	92

ITEM #	DESCRIPTION	INCLUDED
1	In-feed from the roof	No
2	Tee junction	No
3	To the tank	No
4	Pipe bracket	Yes
5	End cap - inlet	Yes
6	Ball seat	Yes
7	Sealing ball	Yes
8	Diverter chamber - 12" pipe	No
9	Filter screens	Yes
10	Heavy duty bracket	Yes
11	End cap - outlet	Yes
12	Screw cap with o ring seal	Yes
13	Flow control valve	Yes
14	Nut & tail hose connection	Yes



POST - WALL

INSTALLATION INSTRUCTIONS

This kit contains all you need except

1. Length of 12" pipe
2. Length of 3" pipe
1 x 1.1" long if using 4" pipe for inlet (ball seat keeper ring)
1 x 3.5" long (chamber outlet)
3. Misc Couplers/Elbows/T pieces as required by installation
4. Glue (suitable for plumbing fittings)

Each Post/Wall First Flush Water Diverter Kit includes

1. Two end caps #5 & #11
2. Ball seat #6
3. Sealing ball #7
4. Socket & screw cap with o-ring seal #12
5. Flow control valves (set of 4) #13
6. Filter screens - one plastic, one stainless steel #9
7. Filter screen spacer (90mm pipe cut 0.3" long)
8. Nut & tail hose connector #14
9. Pipe bracket #4
10. Heavy duty bracket #10

KIT ASSEMBLY

Inlet End: The ball seat #6 is inserted into the top of the end cap as shown. For 3" in-feed - insert the ball seat #6 and glue the in-feed pipe hard down on top of ball seat #6. For 4" in-feed - insert the ball seat #6 and glue the keeper ring (3" pipe cut 1.1" long) hard down on top of the ball seat #6 to keep it firmly in place.

Outlet End: The outlet requires only 3" pipe cut to 3.5" long. Assemble as shown in the attached "Water Diverter Discharge Valve Assembly" drawing making sure to insert ball #7 before attaching cap #12. Select one of the Slow Release Control Valves control valves #13 and fit into hose connector #14 – the word "TOP" should be visible when the valve has been inserted the correct way up into nut & tail fitting. Save the remaining valves for possible later use.

Pipe-Determine the length of 12" pipe required to divert the desired amount of water using the table on page 2. Cut the pipe to length and SMOOTH OFF THE SHARP EDGES to allow easy assembly.

Please take the time to prepare the job correctly as you only get one chance to fit the caps before the glue sets.

NOTE : Before gluing the end caps into place be sure the inlet & outlet of the two end caps are in line. This is essential for fitting the unit against the post or wall.

Caution: When placing the unit into the heavy duty bracket #10, support the unit so that it can not fall forward then fit the pipe bracket #4. Failure to support the unit in the upright position could crack the bottom chamber cap.

Maintenance: Periodically remove the cap #12 and clean the screens #9 and check that the control valve #13 is clear.

