

Sprinkler Rotary Nozzles

Step-By-Step Instructions: See back for details.



Half of a typical home's water usage is used to water the garden.

Rotary nozzles use 20% less water and can help eliminate runoff and overspray.

Sprinkler Rotary Nozzles

www.sustainable-sm.org/landscape

Tools/Parts:

- Wrench
- Low flow valve (anti-siphon if no master back-flow)
- Sprinklers with pressure compensating stems
- Rotary nozzles
- Nozzle adjustment tool



Old sprinkler spraying water onto the driveway.



New sprinkler body with Rotary Nozzle & Pressure Compensating Stem eliminated the overspray.

This picture shows a retrofit of an existing sprinkler to a rotary nozzle sprinkler.

Note:

Toro Precision Spray Nozzles are prohibited in Santa Monica, because the precipitation rate (rate at which sprinkler emits water in inches per hour) exceeds the 0.75 inches per hour requirement. This means these nozzles put out water faster than any soil can absorb it; thereby, increasing the potential for overspray and runoff.

When installing an entirely new sprinkler system, it must be installed 24 inches away from any impermeable hardscapes or materials, like sidewalks, patios, fences, buildings, trees, etc.

- 1** Turn on the sprinklers.
 - Make a note of how many sprinklers you have in each zone and the total number operating on the same valve.
 - Note which sprinklers spray at 45 degrees, 90 degrees, 180 degrees, 360 degrees.
 - Measure the width and length of the zone. You'll need this information to determine the type of nozzles to buy at an irrigation supply store.
- 2** Rotary nozzles operate best at 30-40 psi. In the majority of homes and buildings in Santa Monica, the water pressure is about 90 psi and as a result pressure regulation is required. High pressure can affect the watering coverage of rotary nozzles, wear down your irrigation systems parts quicker than normal, and use more water than needed.
- 3** Replace existing sprinkler valve with a low-flow anti-siphon valve. Anti-siphon not necessary if master backflow device is installed. See Detail A; page 3.
- 4** Remove the old sprinkler bodies.
- 5** Install new pressure compensating sprinkler bodies and replace the nozzles with rotary nozzles. You need to replace all the sprinklers on the valve so that you have the same pressure and they evenly distribute the water. See Detail B; page 3.
- 6** Flush the system by removing the last nozzle in the zone and turning on the sprinklers. Replace nozzle then adjust the rotary nozzles as needed using the nozzle adjustment tool. You can adjust both the radius and the degree of the water coming from the nozzle.
- 7** Change the watering schedule on your sprinkler timer. Use the Santa Monica Watering Schedule as a guide - see www.sustainable-sm.org/landscape.

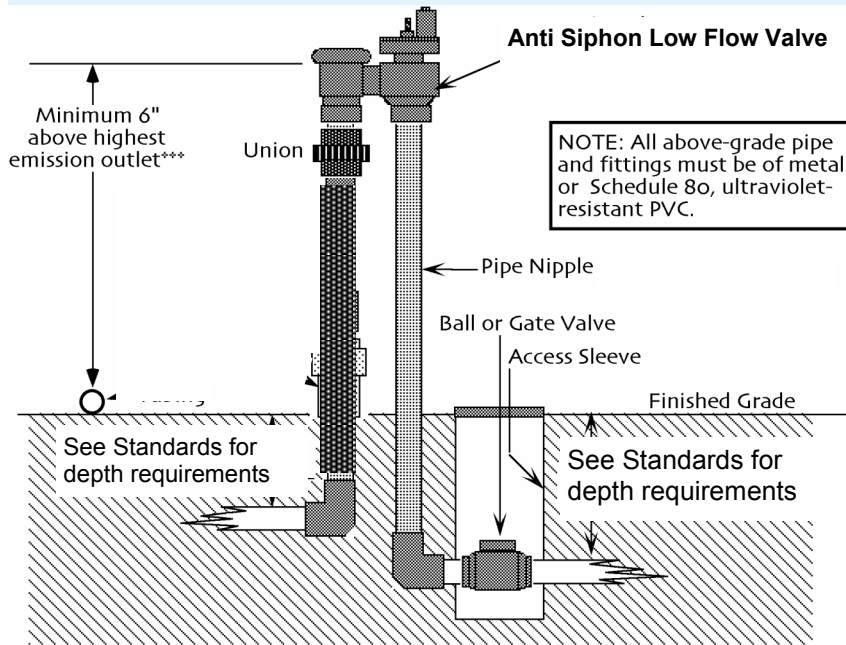
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The City of Santa Monica is not responsible for the performance of any product listed here.

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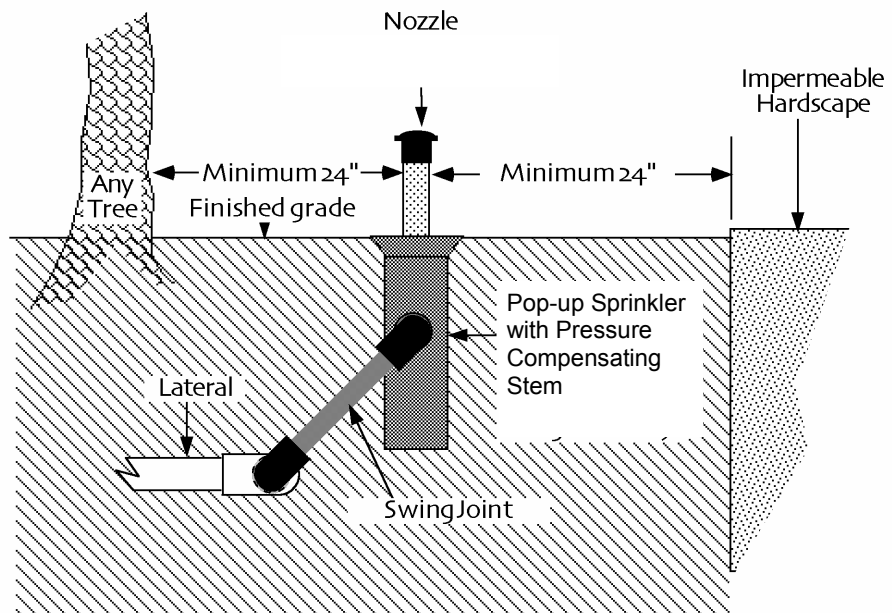
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Detail A Valve Assembly for Residential Sprinkler System*



† The minimum flow rate of the valve must be equal to or less than the flow rate of the zone.
** Optional if Master Device installed at Point of Connection
*** For container zones this dimension must be at least six inches above the rim of the highest container.

Detail B Sprinkler with Rotary Nozzle



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These details are not to scale.

*Commercial and Multi-Family Properties should see details at www.sustainablesm.org/landscape