





Nurseries, Hoop Houses, Green Houses and Tree Farm operations for ornamentals

Grower

Tony Capps; Tree Town USA

Irrigation Equipment Supplier
John Deere Landscapes
1 (800) 275-1461
Ask for the Ag Specialist in your area.

Rain Bird® LF1200[™] Sprinkler offers an efficient solution for container plots

The LF1200 sprinkler is designed for high uniformity so all pots are evenly wetted. In addition, the lower operating pressure prevents misting, decreases evaporation and minimizes wind drift. The straight through nozzle design prevents clogging, and the robust design delivers years of trouble free operation.

See the Rain Bird LF1200 Sprinkler Tech Spec for additional features and benefits.





Using a state of the art computer program, Rain Bird simulated the wetting pattern of numerous sprinkler options. Tree Town selected the LF1200 sprinkler with a yellow nozzle and white deflector at an operating pressure of 40 PSI. Spaced 18' apart down the center of the plot, the LF1200 sprinklers provided the following great results:

CU = 93%; DU = 90% 10% Scheduling Coefficient = 1.1% Application Rate = .249"/Hr Water falling within 30' pattern = 74% Radius of throw on a 12" riser = 31' Flow rate per head = 1.89 GPM

The densogram (middle, right) shows the results in picture form. After the calculations were performed and the sprinkler model selected, a test section was installed to evaluate real world performance. Everyone was pleased with the results.

With the old system, Tree Town had to choose between excessive run-off or dry pots. With the LF1200 sprinkler, pots can be evenly watered and run-off is minimized. This creates a healthier growing environment and increases production potential.

The lower application rate of the LF1200 sprinkler is also a plus. Run times will be longer, eliminating the inefficiencies that occur from pressure variations during short run times. As a result, pumping costs will be reduced.

With increased income and reduced costs, Tree Town can become more profitable with the new LF1200 Sprinkler from Rain Bird.

Rain Bird Corporation Agri-Products Division

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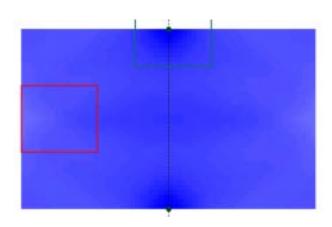
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Drew Wakefield of John Deere Landscapes demonstrates the LF1200 sprinkler compared to the old system. Note the heavy misting and wind drift in the distance from the old system compared to the LF1200 sprinklers.



Irrigation Schedule: Peak water use for the potted plants is listed at .38" per day. The 12" tall above ground containers with typical potting media hold about .75" of water when at field capacity. Thus, irrigation must occur every day to avoid depleting over 50% of the available water. Assuming a full profile and an application rate of .249"/hour, the irrigation duration should be 1.5 hours per day, every day. Since potting media in containers dries out quickly, moisture should be monitored closely to ensure desired results are achieved. At Tree Town, two 45 minute sets will provide the desired moisture, micro-climate control and aeration. The low application rate allows more plots per set with the same available flow. This will shorten the total irrigation time per day.

	Number of LF1200 Sprinklers allowed per schedule 40 pvc lateral with 10% pressure differential				
Slope	3/4"	1″	1 1/2″	2"	3"
0.3%	5	8	17	26	49
0.2%	5	8	17	26	51
0.1%	5	8	18	26	53
0.0%	5	8	18	28	55
-0.1%	5	8	18	28	57
-0.2%	5	8	18	29	60
-0.3%	5	8	18	29	62

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