# N E T A F I M U S A





A Labor Saving

Drip System

for Watering

**Potted Plants** 

# Save Up To 20% on Installation Labor Costs

Netafim USA's Space-It<sup>™</sup> Dripline is a drip system for watering potted plants. It's a thinwall dripline with pre-spaced drippers designed to be placed directly over the top of pots with the location of each dripper visibly marked on the tubing. Positioning of the pots (plants) is quick and easy - just place the pot under the mark on the dripline - saving up to 20% in installation labor costs.

### Each Dripper is Visibly Marked

The location of each dripper in the dripline is visibly marked. This mark contrasts with the black color of the dripline for easy visibility.

• Save Time During and After Installation

Workers don't have to stoop or feel to find the dripper's position in the tubing. The visible mark allows them to quickly and easily identify where each plant should be positioned. This also saves time after installation - there is no need to recheck the dripper's position to make sure the water is dripping into the pot. Growers estimate that the time required to space out a potted crop can be reduced by 20% or more.

### Reduces Crop Loss

Typically with unmarked tubing, some pots are out of position and do not get watered until positioning is corrected. Plant wilting is the usual indicator that a pot is out of position. With Space-It Dripline, you can simply look down a zone to see that the pots are properly positioned without having to wait for plant stress to tell you.

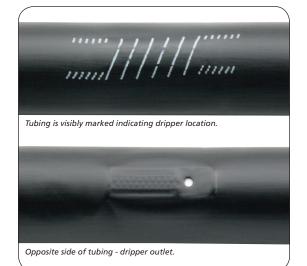
## **Injection Molded Drippers**

Netafim manufactures more drippers than anyone in the world. There is a reason growers trust their crops to Netafim.

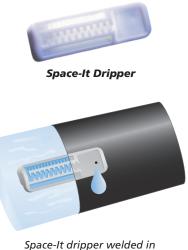
### • Consistent Dripper Performance

Netafim pioneered the use of molded drippers and each one is manufactured to the industry's highest standards. Netafim drippers are injection molded and welded into a wall of seamless tubing. The dripper flow path is not subject to distortion during installation and the clear outlet hole allows water to exit right at the outlet. Ordinary thinwall driplines (tapes) form their drippers by pressing a pattern into a sheet of plastic or into the wall of the tubing. This type of tubing gets stretched during installation altering the dripper's flow path and since there is no clear exit, the water drips from the seam or fold.





**Dripper is Visibly Marked** Mark on the tubing indicates the dripper's location.



Space-It dripper welded in seamless wall of tubing.



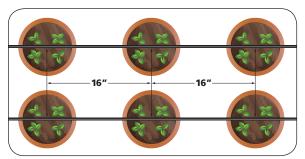


### **Flexible Dripper Spacing**

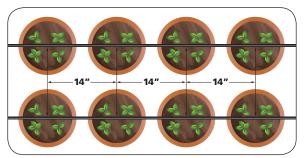
Netafim USA offers a selection of dripper spacing options to fit your needs. Space-It<sup>™</sup> Dripline's standard dripper spacings include 12", 14", 16", 18", 20" and 24".

#### • Choose Your Dripper Spacing

Rather than choosing a pot spacing to match the spacing of the drippers, Netafim Space-It Dripline lets you choose a dripper spacing that matches your needs for pot spacing. Drip lines (tapes) offered by other manufacturers are for Agricultural applications and often only come in 4" dripper spacing increments. If you wanted 14" pot spacing, but were limited to 16" by the tape you were using, you would have wasted 30% of your growing area. Space-It Dripline is available with the most common dripper spacings for potted plants - dripper spacings to fit your needs.



**Other Manufacturer's Set Dripper Spacing** Ordinary tapes with drippers spaced in 4" increments mean growers have to adjust their pot spacing to the tape rather than the spacing desired based on the area.



**Netafim's Flexible Dripper Spacing** Choose the dripper spacing according to your needs and maximize your growing area.

## **Netafim Supplies 'Systems'**

No need to look anywhere else - Netafim has all the components needed for a Space-It Dripline system.

### • Compatible, Quality Components

Troubleshooting a system that is cobbled together from many different manufacturers can be frustrating. It is often difficult to know which parts are compatible. Ordering a complete Netafim system prevents this problem. Netafim offers all the parts you need to make a pot watering system work - from the filter, valve, pressure regulator to the fittings and tubing. Request that your dealer supply all Netafim parts.



Netafim Space-It Dripline System





# Space-It<sup>™</sup> Dripline General Layout Guidelines

Space-It Dripline is the simplest way to achieve a good, long term quality pot watering system. The general layout of the Space-It Dripline is very simple:

- Water is supplied to the driplines from a supply header or submain.
- The dripline is stretched across the top of the pots and is secured at the end connection with enough tension to keep it in place over the top of the pots.
- For lengths over 100 feet, locate the supply header in the center and install the driplines outward in both directions with separate connections for each dripline.

There are several connection options available for Space-It Driplines. A few of the most common connection options are illustrated in the following layouts. Check with an authorized Netafim USA dealer for other installation configurations.

### **Supply Header Connections**

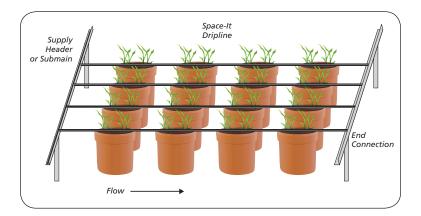
Several materials can be used for the supply header, Polyethylene (PE) pipe and PVC pipe, are just two of the most common. A light tension is placed on the Space-It Dripline, so the supply header must be secured in place. It can be strapped to a solid fixture or sometimes a few rods of rebar driven into the ground are sufficient. The Supply Header should be raised to the level of the pot so the Space-It Dripline doesn't pinch at the edge of the pot.

#### • Polyethylene Pipe

A 3/4" polyethylene pipe is used as the supply header for the Space-It Dripline system in Figure 1.

#### • PVC Pipe

PVC pipe is used as the supply header for the Space-It Dripline system in Figure 2.





*Figure 1:* Polyethylene pipe supply header with Space-It Dripline.



Figure 2: PVC pipe supply header with Space-It Dripline.



# **End Connections**

The Space-It Dripline end connection can be as simple as tying the dripline around a fixture or using a line end fitting.

# • Space-It Dripline Secured to a Fixture

In Figure 3, the end of the Space-It Dripline has been folded around a nail that was driven into a piece of wood and then zip-tied securely. This type of end connection is quick and easy, but the lines can not be flushed without cutting the zip tie. Flushing is not usually needed on a short term crop.

### • Line End Fitting

In Figure 4, the line end fitting is inserted into the Space-It Dripline. This fitting is easily attached to a board or pipe. Flexible cord can also be used to attach the line end fitting to a fixed object. The line end fitting contains a loop which can be pulled to adjust the dripline tension. The fitting can be removed for line flushing if desired.



Figure 3: End of Space-It Dripline secured to a fixture.

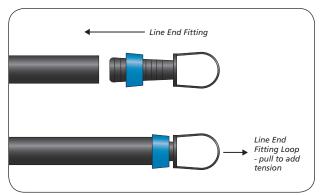


Figure 4: Space-It Dripline with line end fitting.



# **Design Help for Space-It<sup>™</sup> Dripline Systems**

**Step** Determine how many pots can be watered at the same time.

Use the **Zone Flow** chart to help calculate how much water it takes to operate one zone of pots with Space-It Dripline. You do not need to operate the maximum amount, but do not exceed the maximum. If the amount of water required exceeds the amount available, reduce the zone size.

### Zone Flow (GPM)

Space-It	Number of Pots in a Zone					
Flow Rate	500	1,000	2,000	3,000	4,000	5,000
0.2 GPH	2.0	3.9	7.9	11.8	15.8	19.7
0.4 GPH	3.0	6.0	12.0	18.0	24.1	30.1

Based on flow at an average of 10 psi.

Step

1

**Step** Determine how long a row or 'run' can be made. We recommend a row or run length of 100' or less to limit expansion/contraction issues and general operational practices.

Select the major system

Once you have selected

the flow of each zone, it is time to size the major system components.

Recommendations for sizing basic versions of valves, filters, water meters and pressure regulators for your zone flow can be found in these charts. For additional options, contact Netafim USA Customer Service.

components.

# Valves

Item Number	Flow Range (GPM)	Description
Series 80 Nylon 2-Way Electric (24VAC)		
71640-007355	1 - 50	¾" Valve Threaded
71640-007406	1 - 50	1" Valve Threaded
71640-007425	1 - 90	1 ½" Valve Threaded
71610-014528	1 - 175	2" Valve Threaded
71610-013955	1 - 50	<sup>3</sup> / <sub>4</sub> " Valve with Aqua Pro Controller
71610-013969	1 - 50	1" Valve with Aqua Pro Controller
71610-014062	1 - 90	1 <sup>1</sup> / <sub>2</sub> " Valve with Aqua Pro Controller
71610-014526	1 - 175	2" Valve with Aqua Pro Controller



### **Filters**

Item Number	Flow Range (GPM)	Description		
Manual Disc Filters				
70640-001200	1 - 12	¾" Manual Filter, 120 Mesh		
70641-003420	10 - 52	1 <sup>1</sup> ⁄ <sub>2</sub> " Long Manual Filter, 120 Mesh		
70640-004521	40 - 120	2" Dual Lite Manual Filter, 120 Mesh		
Automatic Filter	s - LP Disc-Kleen Seri	es (24VAC)		
70610-022000	50 - 160	2" LP Disc-Kleen, 2 Filters, 120 Mesh		
70610-022100	100 - 240	2" LP Disc-Kleen, 3 Filters, 120 Mesh		
70610-022200	150 - 320	2" LP Disc-Kleen, 4 Filters, 120 Mesh		
70610-022300	150 - 450	3" LP Disc-Kleen, 3 Filters, 120 Mesh		
70610-022400	250 - 600	3" LP Disc-Kleen, 4 Filters, 120 Mesh		



### Water Meters

Item Number	Flow Range (GPM)	Description
70261-005060	8.8 - 110	2" WMR Water Meter, Threaded
70261-009200	45 - 500	3" IRT Water Meter, Flanged
70261-009500	50 - 688	4" IRT Water Meter, Flanged



### **Pressure Regulators** (PRV)

Item Number	Flow Range (GPM)	Description
31000-001000	0.25 - 4.4	3/4 Low Flow PRV, 15 psi
30500-001100	4.5 - 17.6	¾″ PRV, 12 psi
30520-001100	11 - 35	1 1⁄2" PRV, 12 psi
30540-002200	22 - 70	2" PRV, 12 psi



# **Space-It™ Dripline Ordering Information**

Space-It<sup>™</sup> Dripline 8 mil Wall Thickness, 0.636" Inside Diameter

Item Number	Flow Rate	Dripper Spacing	Coil Length
16523-000101	0.2 GPH	12″	9,000'
16523-000102	0.4 GPH	14″	9,000'
16523-000103	0.4 GPH	16″	9,000'
16523-000104	0.4 GPH	18″	9,000'
16523-000105	0.4 GPH	20″	9,000'
16523-000106	0.4 GPH	24″	9,000'

Call Netafim USA Customer Service for custom flow rates, wall thicknesses and dripper spacing - subject to minimum order quantity.



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## **Space-It<sup>™</sup> Dripline Fittings**

Space-It Connection To	Item Number	Description	Bag Qty.
	32500-015270	3/4" MIPT Male Adapter with Ring	50
PVC Pipe	00115-005150	Connector w/Grommet (requires 16.5mm drill bit)	100
	45000-002750	16.5mm PVC Drill Bit	1
Polyethylene	00115-006251	Barb Connector with close-off valve	25
(PE) Pipe	00115-005150	Connector w/Grommet (grommet not required with PE Pipe)	100
Line End	32500-016490	Line End Plug with Ring	100
-	32500-016770	Space-It Coupling with Rings	100
-	32000-007015	Grommet	50
-	45000-001450	8mm Plastic Punch	1

Specifications

### **Technical Specifications**

Filtration	120 Mesh
Maximum Operating Pressure	12 psi
Inside Diameter	0.636″
Wall Thickness	8 mil

#### Maximum **Recommended Tension**

Wall	Temperature		
Thickness	70° F	85° F	100° F
8 mil	22 lbs.	15 lbs.	9 lbs.

### **Dripper Data**

Dripper (GPH)	Exponent (x)	Constant (k)	Kd (0.630)	Cv
0.2	0.45	0.084	0.01	0.025
0.4	0.48	0.128	0.01	0.025

### **Flow Rates**

Dripper	GPM per 100'		
Spacing	0.2 GPH	0.4 GPH	
12″	0.39	0.60	
14″	0.34	0.52	
16″	0.30	0.45	
18″	0.26	0.40	
20″	0.24	0.36	
24″	0.20	0.30	

Based on 10 psi inlet pressure.

### **Reel Dimensions/Weight**

Height	Length	Weight
11″	22″	61 lbs.





**NETAFIM USA** 

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