

# NETAFIM USA

## Sub Surface Techline Quick Install Guide



### Typical Netafim USA Techline Subsurface Layout Tips and Recommendations

Techline can be installed on-surface, under mulch, or buried evenly up to 6". Use guidelines on the back to select which Techline to use, and how to apply properly.

#### Estimating How Much Techline to Use

Multiply the square footage of the area x 12, divide that number by the minimum recommended row of spacing from the General Guidelines Chart. (See back of sheet for more information.)

#### Netafim USA Techfilter

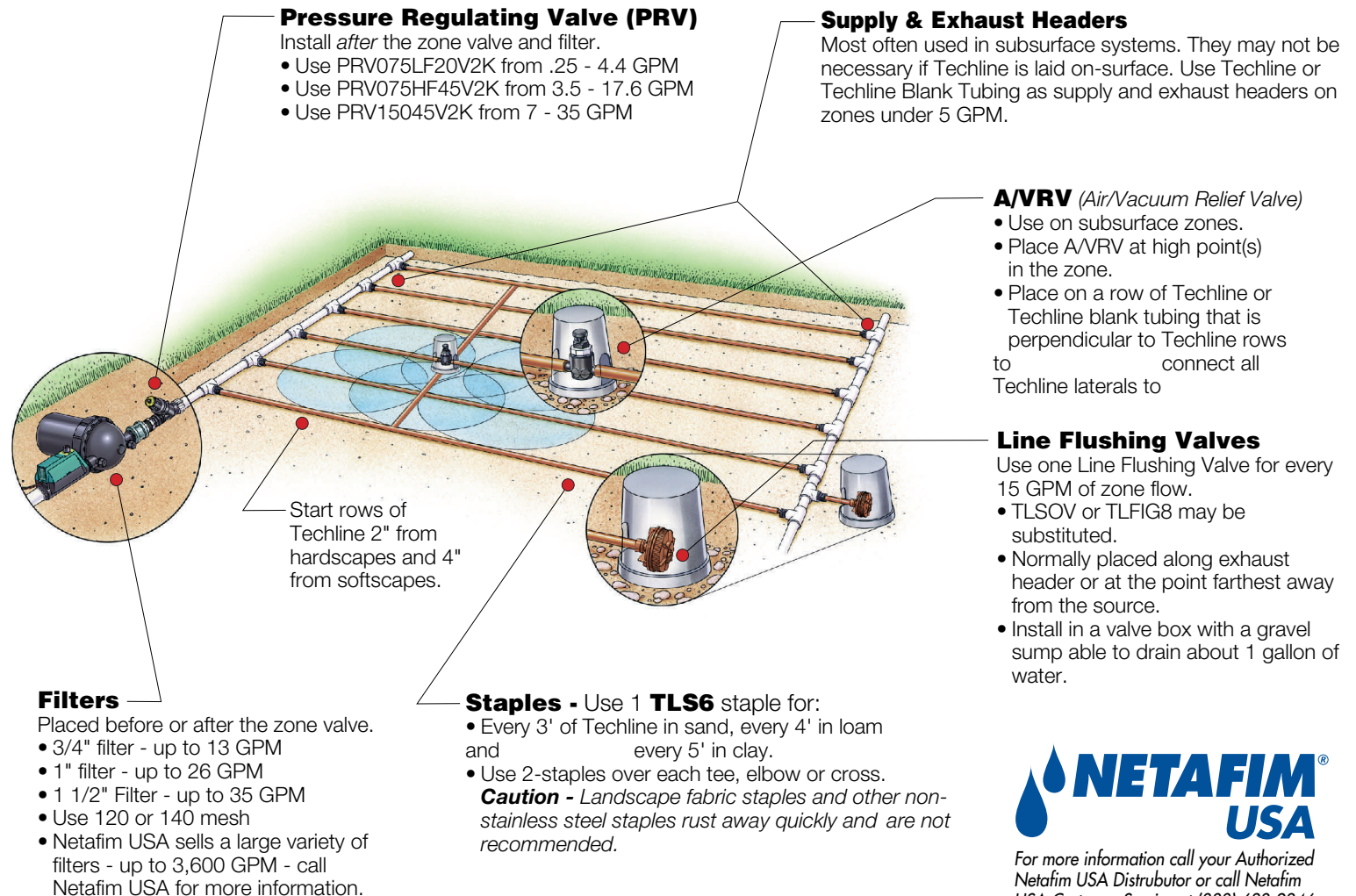
Provides a Limited Lifetime Warranty against root intrusion. See Netafim USA Product Catalog for application information.

#### Fittings

- Techline fittings are recommended. They are the fastest to install, most economical fittings to use, and do not require clamps at pressures less than 45 psi.
- 1/2" Poly insert fittings with clamps can be used.
- 700 Series compression fittings can be used.

#### Low Volume Control Zone

Pre-assembled valve, filter and low-flow regulator (up to 4.4 GPM) is more convenient to use than separate components.



For more information call your Authorized Netafim USA Distributor or call Netafim USA Customer Service at (888) 638-2346.

### TECHLINE General Guidelines

	TURF			SHRUB and GROUND COVER		
	Clay Soil	Loamy Soil	Sandy Soil	Clay Soil	Loamy Soil	Sandy Soil
Dripper Flow	0.4 GPH	0.6 GPH	0.9 GPH	0.4 GPH	0.6 GPH	0.9 GPH
Dripper Interval	18"	12"	12"	18"	18"	12"
Techline Lateral Spacing	18" - 22"	18" - 22"	12" - 16"	18" - 24"	18" - 24"	16" - 20"
Burial Depth	Bury evenly throughout the zone to a max. of 6 inches			On-surface or bury evenly throughout the zone to a max. of 6 inches		
Application Rate (in./hr.)	.29 - .23	.64 - .48	1.44 - 1.08	.29 - .21	.42 - .35	1.08 - .87
Time to Apply 1/4" of Water (in minutes)	52 - 65	23 - 31	10 - 14	52 - 71	36 - 43	14 - 17



## Steps to Choosing and Applying Netafim USA Techline

To determine the proper Techline to use on your project, you will need to know the following:

1. What are you irrigating - shrubs and ground cover or turf areas?
2. What type of soil do you have - clay, loam or sand?
3. How many square feet are going to be irrigated?

Use this simple formula for calculating approximately how much Techline to use in the area:

- Multiply the square footage of the area x 12.
- Divide that number by the minimum number of inches apart the rows should be (also called Techline Lateral Spacing).

This number is found on the Techline General Guidelines Chart. While this quick formula is not meant to replace an actual design and take-off, you will have a fairly accurate idea of how many feet of dripperline you will need.

Refer to the Techline General Guidelines Chart.

For example, when irrigating shrubs with loam soil, choose Techline with 0.6 GPH (gallons per hour) drippers and 18" dripper spacings (drippers are spaced 18" apart inside the tubing). Note the box on the general guidelines chart highlighting the .6/18" column.

This chart gives you important information including:

- How many inches apart the rows will go (18" - 24")
- To what depth you can bury the Techline (a maximum of 6")
- What the application rate is (.42 in/hour with rows 18" apart and .35 in/hour with rows 24" apart)
- How long to run the zone to apply 1/4" of water (36 minutes for rows spaced 18" apart and 43 minutes for rows spaced 24" apart)

Refer to the Techline Maximum Length of Laterals Chart.

Based on the Techline you choose (for our continuing example we will use .6/18" Techline) this chart will tell you how far you can run a length of Techline.

**Note:** The maximum length of each lateral is dependent on the pressure at the beginning of the lateral. If the pressure is 45 psi, you can safely run a .6/18" Techline lateral up to 574'. If the pressure is 15 psi, the maximum length of the run is 322'.

**The Techline Flow per 100' Chart** tells you how many GPM the Techline will use. **Note:** .6/18 example - every 100' will use 41 GPH or 0.68 GPM.

### MAXIMUM LENGTH of a Single Techline Lateral

INLET PRESSURE (psi)	TECHLINE DRIPPER SPACING							
	12"			18"			24"	
15	292	233	175	410	322	247	405	308
25	397	312	238	558	438	335	553	423
35	466	365	279	656	514	394	649	497
45	520	407	311	732	574	439	725	555
Dripper Flow Rate (GPH)	0.4	0.6	0.9	0.4	0.6	0.9	0.6	0.9

### TECHLINE Flow per 100 Feet

DRIPPER SPACING	0.4 GPH Dripper		0.6 GPH Dripper		0.9 GPH Dripper	
12"	40.00 GPH	0.67 GPM	61.00 GPH	1.02 GPM	92.00 GPH	1.53 GPM
18"	26.67 GPH	0.44 GPM	41.00 GPH	0.68 GPM	61.00 GPH	1.02 GPM
24"	-	-	31.00 GPH	0.51 GPM	46.00 GPH	0.77 GPM



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