



## INSTALLATION AND UTILISATION GUIDE

### FEATURES

Water holding capacity	2.1 gal.us/sq.yd. (9.5 L/m <sup>2</sup> )
Drip tape flow rate	1.35 gal/min/100 ft (5.1 L/min/30.5 m)
Mat flow rate	0.007 gal/min/ft <sup>2</sup> (0.3 L/min/m <sup>2</sup> )

Mat widths *custom lengths 5 ft-400 ft (1.5-122 m)	# Of drip tapes * twinwall turbulent
(3 ft) 0.91 m / (4 ft) 1.22 m	2 / 2
(5 ft) 1.52 m / (6 ft) 1.83 m	3 / 3
(7 ft) 2.13 m / (8 ft) 2.44 m	4 / 4
(11 ft) 3.35 m	6

### Included parts

- Integrated drip tape of 0.008 in thick and 1 in (2.5 cm) wide
- Barb driplock 0.25 in (Chapin 250 or equivalent)

### Equipment and requirements

- A 3/4 in (2 cm) Ø polyethylene water header fitted with a 10-12 psi pressure regulator and a 120-180 mesh filter.
- Standard punch of 0.15 in.
- A timer set for short burst at desired cycles. Pulse short cycles of 2-3 minutes.
- 10-12 psi pressure reducer. One reducer per electric valve.
- 3 to 10 in (7.5-25 cm) diameter pots with a bottom hole or more.
- Substrate of 50 % min. sphagnum peat moss and/or coconut fibers with particules size of 0.25 mm-10 mm.
- Compatible with open bottom trays or flats with maximum thickness mesh of 1/8 in (0.3 cm) from the mat.



### GROWING SURFACE PREPARATION

Level and flatten growing surface. Do not exceed 0.5 % slope.

#### Nurseries and garden centers, on the ground

- Take extra precautions when laying mats directly on the ground. It must be free of debris and coarse gravel. Ideally it should be covered with 1-2 in (3-5 cm) of compacted sand or at least by a geotextile.
- Anchor exterior mats with 10 in (25 cm) nails and washer, every 40 in (1m) so as to protect it against wind gusts..

#### Greenhouse

Cover benches with a rigid panel if its surface has openings greater than 3/4 in (2 cm).



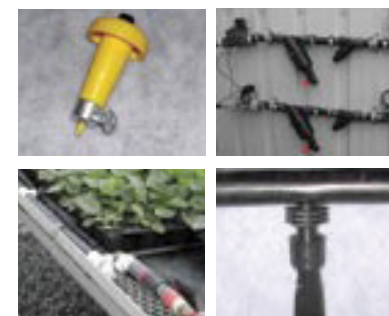
### INSTALLATION STEPS

- Unpack and reserve parts bag.
- Unroll and stretch mat. Let rest.
- Place drip tapes so that they are roughly set in-between pots.
- Seal drip tape ends as per pictures.
- Lay a water pipe, punch 0.15 in holes perpendicular to drip tapes and insert 0.25 in barb-drip locks.
- Make sure the water pression is around 12 psi. A pressure reducer could be necessary.
- Test that water reaches drip tape ends. Untwist tapes and adjust spacing with pressure on between small pots and trays if required.

#### Handmade drip tape end cap



#### Connexion



### IRRIGATION STEPS

- 1 Start-up capillary action by combining overhead and subirrigation; **5-15 min. of subirrigation** and one to three overhead watering(s).
- 2 As soon as new roots get out of the plugs, stop overhead watering (7-10 days).
- 3 **Avoid over irrigating.** Water consumption should be 50-80 % less than with an overhead system. Runoff will occur when mats are filled for more than 25 minutes.
- 4 Check pot's substrate moisture daily by weighing pots or using tensiometer and adjust watering cycles (2-3 minutes at a time) accordingly.
- 5 **Reduce fertigation** rates to no more than 200 PPM of N since there are no runoff. Check EC substrate and adjust accordingly with irrigation between fertigation cycles. Usually, reduce fertilizers concentration by 50 % compare to overhead irrigation.
- ★ Use a wetting agent into watering to speed up the capillary link at irrigation start up and after long dry period.

### MAINTENANCE

- Disinfect, sweep and rinse after each crop.
- Repair tears on Microfab cover to avoid contamination and UV damage to mat's sub-layers.
- Store below 40 °C (105 °F) and protect against UV rays. For short storage periods, simply clean mat, roll up to manifold and cover with tarp.
- **Refrain from injecting pesticides or growth regulators through the drip tapes because of their residual effects. Foliage or overhead application is recommended. Always consult a Soleno Textile representative for any additional advise.**

**AQUAMAT**

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