

Ebb and Flow Mat™

The Internationally patented Ebb & Flow Mat utilizes the principles of capillary action and ebb and flow in a simple, innovative manner that avoids the major disadvantages of both overhead or drip irrigation systems



How the Ebb and Flow Mat works:

Drip-Tape on each side of the mat delivers water to the specially designed three-layered nursery system. (Additional drip tape used for 6' and wider mats) The water is then evenly and rapidly distributed by capillary action throughout the system using the mat's central layer of non-woven geotextile. The bottom impervious layer contains the water to avoid leakage while the top layer of ground mat both protects the geotextile and minimizes loss of water to the air.

When pots or trays are placed on the mat, the downward pressure brings water through the ground cover and into contact with the pots, causing water to rise into contact with media at the bottom and side vents. Capillary action then takes the water to the root zone of plants. The top surface of media remains dry for all or most of the time, inhibiting growth of weeds and algae.

Applications:

- Greenhouse and Nursery
- Retail Garden Centres
- Green Roofs
- Living Walls

Features:

- Pressure compensating emitters
- Eliminates anaerobic conditions in soil
- Eliminates bacterial and fungal conditions
- Plant material can establish 20% faster
- Plant will only use precise water needs

Operating Range:

- Operating Pressure: 10-15 PSI
- Drip Tape-Emitter-Opening PSI: 7.25-11.60 PSI
- Drip Emitter – 0.58 GPH / 12" Spacing
- Required Filtration – 120 - 130 Mesh
- Pressure Regulator – Set at 15 PSI

Mat Specifications:

- **Top layer** – Groundcover Cloth (Water permeable membrane over the water conducting geotextile fabric. Black in color and made of polypropylene. UV Stabilized.
- **Middle layer** – Geotextile Fabric that conducts water by capillary action and mass flow. It holds up to 1 gallon of water per square yard. Resistant to chemical and biological breakdown. Made of polyester fibres and other elements for water absorption.
- **Bottom Layer** (Impermeable layer) – Polypropylene base membrane that restricts drainage loss and encourages longitudinal movement of water. Resistant to chemical and biological breakdown.

Ordering Information:

Ebb and Flow Mats can be ordered in specified widths of:

- 4' Wide Mat (EFM-040)
- 5' Wide Mat (EFM-050)
- 6' Wide Mat (EFM-060)

For custom width mats, call KISSS America at (800) 376-7161 or e-mail (savewater@kissusa.com)



Ancillary Items / Ordering Information:

Ebb & Flow Mat Header Pack - 4' and 5' Widths (Part # EFM-HP-01)

Qty.	Part #	Description
2	EFM-SL02	Tape-Loc 90 Degree Ell
1	EFM-SL01	Tape-Loc x 3/4" FHT Swivel Tee w/Washer
2	EFM-RL01	Tape-Plug
1	PR-08	In-line Pressure Regulator - 15 PSI - 1-7 GPM
1	FIL-075-S	Disc Filter
6	PCLIP	P-clips - For Ebb & Flow Mat
Width of Mat	EFM-TAPE	Drip Tape - For Top of EFM (Header)

Header Pack Components:



Pressure Regulator



Filter



Fittings for Header and Mat
Header Drip Tape (Not Shown)

Ebb and Flow ancillary items also can be ordered separately from Header Pack Kits

Ebb & Flow Mat Header Pack - 6' and larger Widths (Part # EFM-HP-02)

Qty.	Part #	Description
2	EFM-SL02	Tape-Loc 90 Degree Ell
1	EFM-SL01	Tape-Loc x 3/4" FHT Swivel Tee w/Washer
1	BFF-SL01	Tape-Loc Tee
3	EFM-RL01	Tape-Plug
1	PR-08	In-line Pressure Regulator - 15 PSI - 1-7 GPM
1	FIL-075-S	Disc Filter
8	PCLIP	P-clips - For Ebb & Flow Mat
Width of Mat	EFM-TAPE	Drip Tape - For Top of EFM (Header)

Layers of the Ebb and Flow Mat:

