

Hy-Tex Sedimat™ Sediment Entrapment Mats

COVERAGE GUIDELINES

The Brand Name for Quality

Hy-Tex Sedimat™

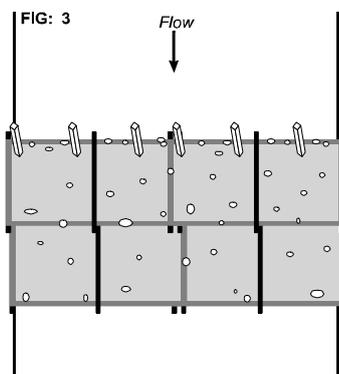
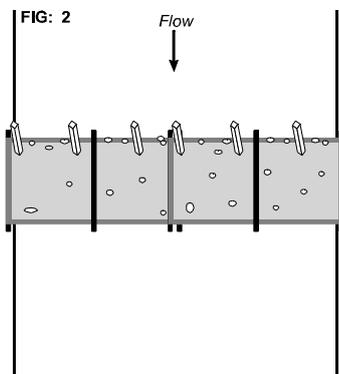
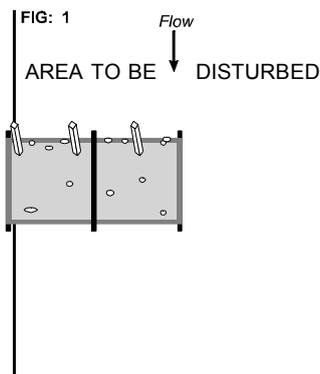
Sediment Entrapment Matting

MAT SIZE 1.20 x 3.00m

Sedimats™ are easy to apply in a variety of situations in both natural and artificial channels once their guidelines for use are understood.

Firstly, for maximum effectiveness, mats should be installed across the full width of the stream. Faster moving water requires a greater length of coverage than slower moving water, especially if the flow is turbulent. Also stream beds with a preponderance of silt and clay require a greater length of coverage than if the sediment is primarily sand and gravel. The number of mats needed for a particular location is also directly proportional to how invasive the project there will be.

Minimum Length of Down Stream Coverage Suggested				
Water Velocity	0-0.3m/s	0.3-0.6m/s	0.6-0.9m/s	>0.9m/s
Fines mostly sand	1.20m	2.40m	3.60m	>5.00m
Fines mostly silt and clay	2.40m	4.80m	7.20m	>10.00m



	Guidelines	Comments
LOCATION	a). The mats must be installed downstream of the area to be disturbed, and should be placed as close as possible to the works area without causing disruption.	<i>The mats are at their most effective when encountering sediment directly after it is disturbed - as the sediment travels downstream it becomes more dispersed in the water. However, if the current immediately below the work area is so fast and turbulent that sediment may be transported right over the mats then they can be positioned downstream at the first slow spot.</i>
	a). Before works begin, and starting at the position furthest up-stream, unroll and stretch out the mats then submerge them in the water at right angles to the flow.	<i>The mats can be unrolled across or down the channel to provide any length/width of coverage.</i>
INSTALLATION	b). Secure up-stream edges with sufficient stones/stakes to prevent lift by the current. If required, add further stones/stakes to ensure the mats lay flat on the stream bed and will not be displaced (Fig: 1)	<i>Were currents are/may be strong, or if the mats will be installed for a long time, it is advisable to use stakes. It is important the current is not allowed to flow under the mats. Avoid covering too much of the mat with stones (accumulating silt will act as an anchor).</i>
	c). Where several mats are required to cover the channel width, lap the sides (Fig: 2)	<i>The full width of the channel should be protected unless there is a specific reason.</i>
	d). Where more than one row is required, tuck the up-stream edges under the preceding mats (Fig:3)	<i>Refer to coverage guidelines</i>
REMOVAL	a). It is important to regularly check if the mats are full. Feel/Look for the presence of sediment lying on top of the downstream edge of the mat.	<i>When the mats are full they must be replaced or more added to the downstream end of the existing mats.</i>
	b). When construction activities are complete, or the mats full, they can easily be removed either by rolling them into a machinery bucket or dragging them onto the bank.	<i>The mats are capable of trapping in excess of 250kg of sediment so will require machinery removal when heavily laden. When being removed there is often slight leakage, if this is not acceptable then mats should be temporarily installed downstream to trap this.</i>
	c). If required, the mats can then be unrolled, secured to the bank (with fixing pins or stakes) and seeded.	<i>The sediment laden biodegradable mats provide instant surface stabilisation and a rich seedbed for vegetation restoration, thereby avoiding disposal problems. If desired the support stays can easily be cut free for re-use or disposal.</i>

WARNING - ENSURE YOU PLAN AHEAD FOR REMOVAL OF MATS AS THEY WILL BE HEAVILY LADEN WITH SILT