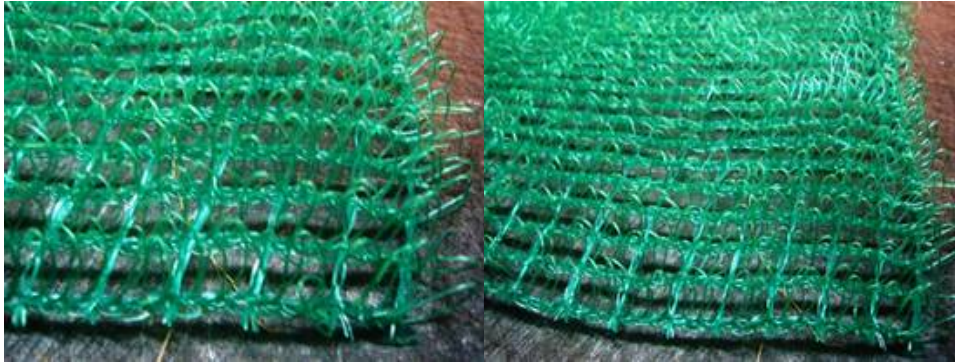


## Erosion Control Mat : Standards and Properties



### Green Erosion Control Mat :

The Erosion Control Mat is designed for outdoor purposes on nearly all types of geography. The primary purpose is to protect and stabilize layers over precious topsoil. It provides the roots of germinating plants with a stable foundation. In addition, the Erosion Control Mat provides better aeration to the plants, and enhances water usage. Erosion Control Mat is available with variable spaced openings according to the vegetation and soil requirements.

### Technical Figure :

<u>Erosion Control MAT Technical Figure</u>	
Material	Polyethylene
Melting Point	$\geq 110^{\circ}\text{C}$
Color	Green
Thickness	$\geq 10\text{mm}$
Width	$\geq 3.0\text{m}$
Weight	$\geq 250\text{g}/\text{m}^2$ (ASTM D5261)
Interstice Rate	$\geq 90\%$ (Archimedes'principle)
Sum of Erosion Control Loops	$\geq 4\text{pcs}/\text{cm}^2$
Loop Fiber Diameter	$\geq 0.35\text{mm}$
Structure	3D filament fiber weaving mat
Mesh Size	MD Size $10\text{mm} \pm 10\%$
	CD Size $7\text{mm} \pm 10\%$
Tensile strength	MD Strength $\geq 5 \text{ kn}/\text{m}^2$ (ASTM D4595)
	CD Strength $\geq 2 \text{ kn}/\text{m}^2$ (ASTM D4595)

## Properties :

--The Erosion Control Mat is anti-UV and suitable for all weather conditions. It even remains the flexibility at low temperatures.

--The Erosion Control Mat can be applied where hydro seeding seeds cannot be well established, or where land slope is over 45 degrees gradient that generally considered as unsuitable for seeds to grow well.

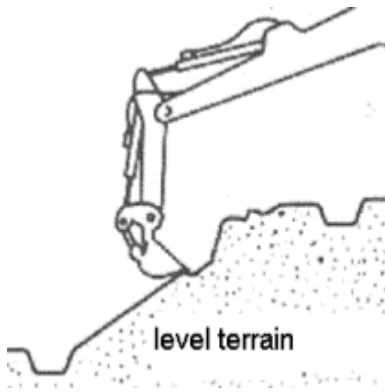
--The Erosion Control Mat is one of the vital products controls the washout top soil at steep land slope, and also provides a stable function to prevent landslide.

--Furthermore, the Erosion Control Mat can be used either to prevent water from permeating the land slope or to control the amount of infiltration that occurs during various rain events. It can strengthen the soil surface to be steady effectively.

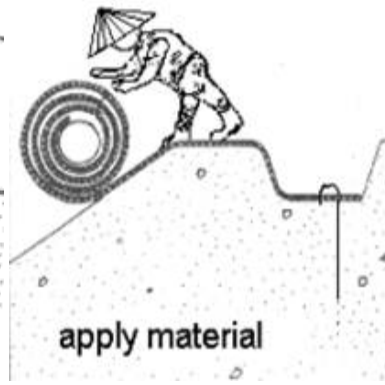
-- In conclusion, the Erosion Control Mat can mainly provide the function of protecting the existing soil to maintain imported top soil, and also provide moisture retaining agent for the imported top soil.

## Installation :

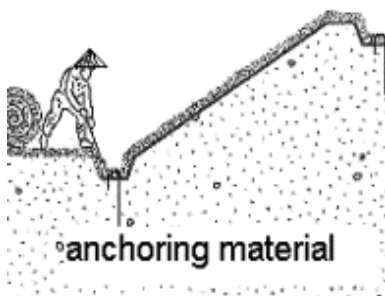
1. Loosen soil, remove stones and unwanted vegetation, and level the terrain.
2. Applying of seeds, mat material, and top soil are determined by conditions of base soil.
3. The mat material is placed directly on the leveled ground with at least a 5 cm overlap. To link mat pieces with the #10 or a larger wire at every 2 to 3 meters intervals.
4. Make sure to secure the work with stone trench as shown in diagram at in the last part.



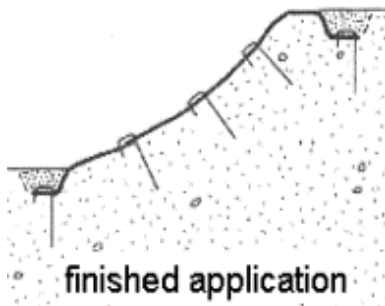
level terrain



apply material



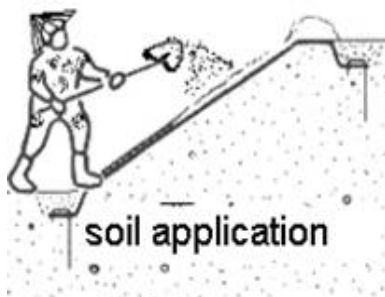
anchoring material



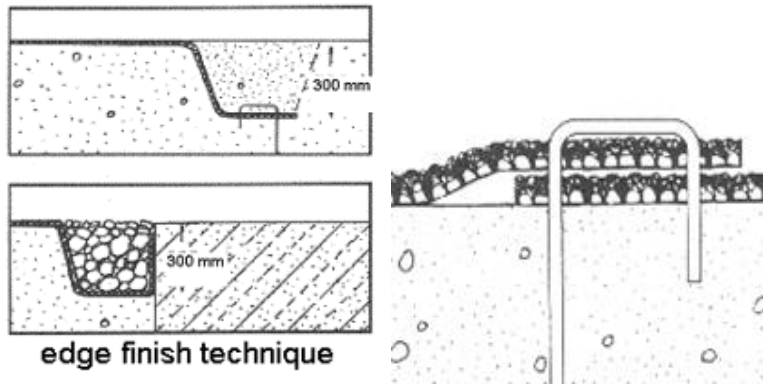
finished application



spread seeds



soil application



## Maintenance :

Depending on the variety of plant, frequent watering and fertilization are necessary particularly in the initial growth phase.