

# PYRAMAT® HIGH PERFORMANCE TURF REINFORCEMENT MATS

*Pyramat HP-TRM is the most sophisticated vegetation enhancing mat on earth!  
Exceptional UV resistance.*

## What is Pyramat HP-TRM?

Pyramat is a high performance 3- dimensional mat manufactured in the USA. The strength of Pyramat is due to its patented and unique woven geotextile construction. The method gives Pyramat unsurpassed dimensional stability, functional longevity which is not found in other types of permanent or degradable erosion control products. Its UV stability makes it ideal for arid and semi arid environments where total vegetation cover is not likely to occur. Pyramat's ability to resist higher water velocities and shear stresses due to its strength and ability to hold soil and vegetation combine to stabilise the slope faster.

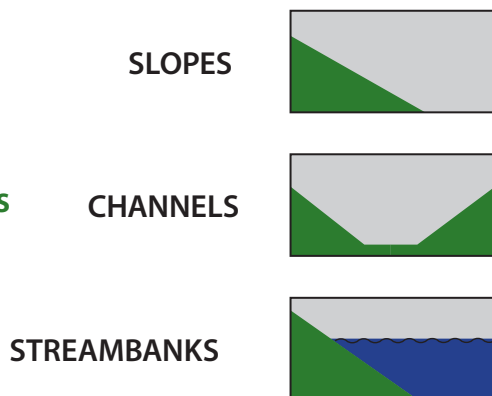
Available colours: Green, Tan.

## Pyramat HP-TRM

Designed to be soil filled for the most demanding conditions. This is the heaviest weight TRM available.

- 10 times stronger than traditional TRMs
- Ideal for extremely steep slopes
- Has 3 times the UV resistance of conventional TRMs

## Applications



## Limitations

Pyramat is not recommended under the following conditions:

- ▶ Continual flow channels
- ▶ Unfertile soils
- ▶ Shoreline applications with high wave action



**Permanently anchors the root structure to provide twice the erosion protection of vegetation alone!**



Before



6 Weeks After

**Outperforms and is more cost-effective than conventional erosion control methods, including:**

- ▶ Large rock riprap
- ▶ Grouted riprap
- ▶ Gabions
- ▶ Concrete paving
- ▶ Hard roadside shoulders
- ▶ Articulated concrete blocks
- ▶ Fabric formed revetments

**Main Properties of Pyramat HP-TRMs:**

- Construction: Patented 3-dimensional woven matrix makes it 10 times stronger than first generation TRMs, with performance unequaled in turf reinforcement
- Tensile Strength: 58.4 kN/m tensile strength meets US EPA definition of a High Performance Turf Reinforcement Mat
- UV Resistance: Patented UV protection package provides superior resistance to the damaging effects of ultraviolet radiation

**PYRAMAT PHYSICAL PROPERTIES**

PROPERTY	TEST METHOD	PYRAMAT
<b>Physical</b>		
Mass/ Unit Area	ASTM D 6566	455 g/m <sup>2</sup>
Thickness	ASTM D 6525	10.2 mm
Light Penetration %	ASTM D 6567	10%
Colours		Green, Tan
<b>Mechanical</b>		
Tensile Strength	ASTM D 6818	58.4 x 43.8 kN/m
Tensile Elongation	ASTM D 6818	65% (max)
Resiliency	ASTM D 6524	80%
Flexibility	ASTM D-6575	615000 mg-cm (avg)
<b>Durability</b>		
UV Resistance @ 6000 hrs	ASTM D 4355	90%
<b>Performance</b>		
Shear Stress (3) (vegetated)	Large Scale	718 Pa
Manning's "n" (4)	Calculated	0.028
Velocity (3)	Large Scale	7.6 m/sec
Seedling Emergence (4)		296%
Roll Size		2.6 m x 27.4 m

- Notes:**
1. Property values are effective 08/2006 and are subject to change without notice.
  2. MARV indicates minimum average roll value calculated as the typical minus two standard deviations. Statistically it yields a 97.7% degree of confidence that any sample taken during quality assurance testing will exceed the value reported.
  3. Maximum permissible velocity and shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetation classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers.
  4. Calculated as typical values from large scale flexible channel lining test programs with a flow depth of 150 to 300 mm.

## **Disclaimer**

The information presented herein, while not guaranteed, is to the best of our knowledge true and accurate.

While every effort has been made to provide accurate and reliable information, it is up to the user of this brochure to verify all information, including designs it might be based upon, with an independent source. Application of this data must be made on the basis of responsible professional judgement.

Except when agreed to in working conditions of use, no warranty expressed or implied is made regarding the performance of any product, since the manner of use and handling is beyond our control.