Manitoba Infrastructure MATERIALS ENGINEERING BRANCH	Standard No.: **APL-151** Effective Date Current: **February 2018** Previous: N/A Page 1 of 2
Materials Specification For: **Biodegradable Erosion Control Blankets**	

Erosion Control Blankets

1) Must be 100% organic biodegradable. This shall include parent material, stitching, and netting.

2) The netting shall be bonded sufficiently to the parent material to prevent separation of the net from the parent material for the life of the product.

3) The netting shall be capable of withstanding moderate foot traffic without tearing.

4) The minimum mat thickness shall be 9 mm as measured in place.

Table 1. Specifications for Biodegradable Erosion Control Blankets

Type	Longevity	Allowable Slope Gradient (H:V)	Minimum Product Permissible Shear Stress (Pa)	C Factor
Class 1* Short Life	6-12 months	4:1 or flatter	50	0.2 or less
Class 2 Medium Life	12-24 months	2.5:1 or flatter	70	0.2 or less
Class 3 Long Life	>24 months	2:1 or flatter	95	0.2 or less

1. Class 1 replaces Class 1, Type Urban Biodegradable

Anchoring Devices:

1) All materials and additive components that are used to manufacture the anchoring devices shall be completely biodegradable as determined by ASTM D 5338-92.

2) All materials shall be environmentally safe, and shall have no potential for soil and/or water contamination.

3) Petroleum based plastics or composites containing petroleum based plastics will not be allowed.

4) Materials deemed to present a hazard from splintering or spearing will not be approved.

5) The anchoring devices shall maintain their mechanical anchoring ability for at least two months, and substantially degrade within four months during the months of warm soil conditions (above 12 ºC).

6) The anchoring devices shall be shaped, using barbs, twists, bends, or other methods, to provide additional mechanical pull resistance when installed in the soil.