

PART 1 - GENERAL

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| <u>1.1 Section Includes</u> | .1 | Materials and installation of polymeric geotextiles purpose of which is to:
.1 Separate and prevent mixing of existing and granular materials of different grading. |
| <u>1.2 Related Sections</u> | .1 | Section 01 33 00 - Submittal Procedures. |
| <u>1.3 Measurement Procedures</u> | .1 | Geotextiles will be measured in accordance with Section 01 10 10. |
| <u>1.4 References</u> | .1 | American Society for Testing and Materials International, (ASTM)
.1 ASTM D4632. Grab Tensile strength test.
.2 ASTM D 4751, Standard Test Method for Determining Apparent Opening Size of a Geotextile. |
| | .2 | Canadian General Standards Board (CGSB)
.1 CAN/CGSB-4.2 No. 11.2-[M89(April 1997)], Textile Test Methods - Bursting Strength - Ball Burst Test (Extension of September 1989).
.2 CAN/CGSB-148.1, Methods of Testing Geotextiles and Complete Geomembranes.
.1 No.7.3-[92], Methods of Testing Geotextiles and Geomembranes - Grab Tensile Test for Geotextiles. |
| <u>1.5 Submittals</u> | .1 | Submit samples in accordance with Section 01 33 00 - Submittal Procedures. |
| | .2 | Submit to a Departmental Representative geotextile sample at least 4 weeks prior |

to beginning Work.

1.6 Delivery, Storage and Handling

- .1 During delivery and storage, protect geotextiles from direct sunlight, ultraviolet rays, excessive heat, mud, dirt, dust, debris and rodents.

1.7 Waste Management and Disposal

- .1 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .2 Collect and separate for disposal paper, plastic polystyrene, corrugated cardboard, packaging material in appropriate on-site bins for recycling.
- .3 Fold up metal banding, flatten and place in designated area for recycling.

PART 2 - PRODUCTS

2.1 Material

- .1 Geotextile: Non-Woven synthetic fiber fabric, supplied in rolls.
 - .1 Width: 3.5 m minimum.
 - .2 Length: 150 m minimum.
- .2 Physical properties:
 - .1 Mass per unit area: to CAN/CGSB-148.1, No.2, minimum 237 g/m².
- .3 Hydraulic properties:
 - .1 Apparent opening size (AOS): to ASTM D 475], 0.3 mm.
 - .1 Permittivity: to ASTM D 4491, 2.2 pers.
- .4 Securing pins and washers: to CAN/CSA-G40.21, Grade 300W, hot-dipped galvanized with minimum zinc coating of 600 g/m² to CAN/CSA G164.

PART 3 - EXECUTION

3.1 Installation

- .1 Place geotextile material by unrolling onto graded surface in orientation, manner and locations indicated and retain in position with pins or weights.
- .2 Place geotextile material smooth and free of tension stress, folds, wrinkles and creases.
- .3 Place geotextile material on sloping surfaces in one continuous length from toe of slope to upper extent of geotextile.
- .4 Overlap each successive strip of geotextile 600 mm over previously laid strip.
- .5 Pin successive strips of geotextile with securing pins at 600 mm interval at mid-point of lap.
- .6 Protect installed geotextile material from displacement, damage or deterioration before, during and after placement of material layers.
- .7 After installation, cover with overlying layer within 4 h of placement.
- .8 Replace damaged or deteriorated geotextile to approval of a Departmental Representative.
- .9 When placing Geotextile underwater, anchor the submerged portions with weights as required. Weights will be sacrificial and should be made of material which is not harmful to the environment.
- .10 Installation procedures shall be reviewed by the Departmental Representative prior to commencing the work.

Structure #303	GEOTEXTILES	31 32 19.01
Breakwater Extension		Page 4
Skidders Pond, Prince Co., PE		
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3.2 Protection .1 Vehicular traffic not permitted directly
on geotextile.