

SECTION 02240

GEOTEXTILES

PART 1 GENERAL

1.01 SUMMARY

- A. Work Included Geotextile for areas below structures, at perforated drainpipe trenches, below base course, and below riprap

1.02 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide product data on fabric.
- D. Manufacturer's Installation Instructions: Indicate installation requirements and special procedures.

1.03 QUALITY ASSURANCE

- A. Perform Work in accordance with Section 01400.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle equipment according to manufacturer's instructions and the provisions of Section 01600.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Geotextile for areas below structures and for use at perforated drain pipe trenches and as specified elsewhere, shall be Mirafi 140N, or equal
- B. Geotextile below riprap shall be as follows:
 - 1. For subgrade reinforcement under riprap. Either woven or non-woven polyester, polypropylene, stabilized nylon, polyethylene or polyvinylidene chloride. Fabric shall have the minimum strength values in the weakest principle direction. Non-woven fabric may be needle punched, heat bonded, resin bonded, or combinations thereof
 - 2. Insect, rodent, mildew, and rot resistant.
 - 3. Furnish in a wrapping, which will protect fabric from ultraviolet radiation and from abrasion due to shipping and hauling. Keep geotextile dry until installed.

4. Clearly mark fabric rolls showing fabric type
5. If sewn seams are used, furnish a field sewn seam sample produced from the geotextile fabric and thread and with the equipment to be used on the project, prior to installation
6. Comply with the following physical properties

Test	Method	Value
Grab Tensile Strength (lbs)	ASTM D-4632	200 min
Puncture Strength (lbs) using 5/16-inch Flat-tipped Rod	Modified ASTM D-3787	80 min
Mullen Burst (lbs/in ²)	ASTM D-3786	250 min
Elongation at Required Strength (percent)	ASTM D-0632	20 min
Equivalent Opening Size (U.S. Standard Sieve)	ASTM D-4751	30-140
Water Flow Rate (gal/min/ft ²) at 50 mm Constant Head	ASTM D-4491	10 min

- C. Geotextile below base course shall be Mirafi 500X, or equal

PART 3 EXECUTION

3.01 INSTALLATION

- A. Geotextile shall be installed in accordance with manufacturers recommendations.
- B. Geotextile shall be lapped a minimum of 24 inches.
- C. CONTRACTOR shall protect the construction fabric from exposure to the sun until installation. Construction fabric shall be covered with stone or soil immediately upon placement.

END OF SECTION