**FABRIC INSERT INLET PROTECTION**

(1-1-24)

**Description**

Install, maintain, and remove Fabric Insert Inlet Protection, of the type specified, in inlet structures (catch basins, drop inlets, etc.) in areas where asphalt or concrete may prevent the proper installation of a Rock Inlet Sediment Traps Type C, or as directed by the Engineer.

**Materials**

Provide a fabric inlet protection device composed of a fitted woven polypropylene geotextile double sewn with nylon thread suspended sack. TheFabric Insert Inlet Protection shall be manufactured to fit the opening of the catch basin or drop inlet or shall have a deflector to direct runoff from the curb opening into the fabric sack. TheFabric Insert Inlet Protection shall have a rigid frame or support system to support the loaded weight of the product. The product shall have lifting loops for removing the device from the basin and will have dump straps attached at the bottom to facilitate the emptying of the device. The Fabric Insert Inlet Protection shall have an overflow system to allow stormwater to enter the inlet structure and avoid ponding on the roadway when the device reaches capacity.

The fitted filter assembly shall have the following physical properties:

Type 1 (High Flow):

|  |  |  |
| --- | --- | --- |
| **Physical** | **Test Method** | **English** |
| Grab Tensile | ASTM D-4632 | 255 x 275 lbs |
| Minimum Puncture Strength | ASTM D-4833 | 125 lbs |
| Mullen Burst | ASTM D-3786 | 420 PSI |
| Minimum UV Resistance | ASTM D-4355 | 70 %. |
| Flow Rate | ASTM D-4491 | 200 gal/min/ft2 |
| Apparent Opening | ASTM D-4751 | 20 US Sieve |
| Permittivity | ASTM D-4491 | 1.5 sec-1 |

Type 2 (Low Flow):

|  |  |  |
| --- | --- | --- |
| **Physical** | **Test Method** | **English** |
| Grab Tensile | ASTM D-4632 | 315 x 300 lbs |
| Grab Elongation | ASTM D-4632 | 15 x 15 % |
| Minimum Puncture Strength | ASTM D-4833 | 125 lbs |
| Mullen Burst | ASTM D-3786 | 650 PSI |
| Minimum UV Resistance | ASTM D-4355 | 70 %. |
| Flow Rate | ASTM D-4491 | 40 gal/min/ft2 |
| Apparent Opening | ASTM D-4751 | 40 US Sieve |
| Permittivity | ASTM D-4491 | 0.55 sec-1 |

**Construction Methods**

Strictly adhere to the manufacturer’s installation instructions and recommendations. Maintenance shall include regular daily inspections and after each qualifying rain event. The Fabric Insert Inlet Protection shall be emptied, cleaned and placed back into the basin when it reaches 50% capacity or as directed by the Engineer.

**Measurement and Payment**

*Fabric Insert Inlet Protection, Type* \_\_ will be measured and paid in units of each of the type specified, complete in place and accepted. Such payment shall be full compensation for furnishing and installing the *Fabric Insert Inlet Protection, Type* \_\_ in accordance with this specification and for all required maintenance.

*Fabric Insert Inlet Protection Cleanout* will be measured and paid in units of each for the maintenance of the device, cleanout and disposal of accumulated sediments.

Payment will be made under:

|  |  |
| --- | --- |
| **Pay Item** | **Pay Unit** |
| Fabric Insert Inlet Protection, Type \_\_ | Each |
| Fabric Insert Inlet Protection Cleanout | Each |